

comprising the budget year and the first year following the budget year. The capital budget and forecast are reviewed by the Director of Finance of the City and the Gas Commission and are forwarded to City Council for approval. These budgets and forecasts are estimates and are subject to future events and the passage of time.

Whenever a rate change is sought by PGW or other parties, the Gas Commission holds public hearings on the proposed change at which PGW and other interested parties are permitted to present evidence supporting their position with respect to the rates. Community Legal Services, Inc. was appointed by the Gas Commission in 1988 to serve as Public Advocate in rate hearings to represent residential customers. The Gas Commission issues orders based upon its findings. These orders may direct PGW to reduce expenses in certain areas or increase spending on certain items or to undertake specific projects. The Gas Commission considers a number of factors before determining whether to accept, modify or reject the rate increases proposed by PGW. The Gas Commission orders regarding rates may be appealed by PGW and other interested parties to the Court of Common Pleas of Philadelphia County with further right of appeal to the Commonwealth Court.

Rates and Charges

The rates fixed by the Gas Commission, to be charged by PGW for providing gas and related services, are subject to various statutory provisions. The General Ordinance and the Management Agreement, the complete text of which was authorized by ordinance, each contains a rate covenant. In addition, the Philadelphia Home Rule Charter contains provisions which authorize the Department of Public Property of the City pursuant to standards ordained by City Council to fix rates and impose charges in the amount necessary to yield the City at least an amount equal to PGW's operating expenses and debt service payments (including sinking fund requirements), but only in the event PGW is not managed and operated pursuant to a lease with an entity other than the City. See APPENDIX C for a further description of the General Ordinance.

The Management Agreement directs the Gas Commission, without further authorization of City Council, to fix rates and charges (other than charges to the City and the Philadelphia Board of Education, which are subject to approval of City Council) which, together with other Project Revenues, will in each fiscal year produce revenues sufficient, at a minimum:

- (a) to pay all the operation and maintenance costs and expenses of PGW, including, but not limited to, depreciation, employee retirement costs and a management fee to PFMC not exceeding \$300,000 annually; to pay debt service (including sinking fund deposits) becoming due in such fiscal year on debt incurred for PGW and to meet applicable rate covenants;
- (b) to make annual payments to the City in the aggregate principal amount of \$18 million;
- (c) to provide appropriations for debt reduction and capital additions not otherwise provided which are determined by the Gas Commission to be reasonable and which are approved by City Council; and
- (d) to provide reasonable additions to working capital as may be determined by PFMC and approved by the Gas Commission.

The Management Agreement provides that, for purposes of complying with such rate requirement, the amount of operating expenses which do not represent an actual outflow of funds (e.g., depreciation) may be included in determining whether revenues are sufficient to meet other costs, expenses and requirements.

The Management Agreement also requires the rate schedules to be nondiscriminatory and based on a suitable and reasonable classification of the services provided, taking into consideration the nature and purpose of the use, the quantity used, the time when used, the available supply of gas and other competing fuels, the maximum demand and State and Federal laws, regulations and guidelines. The Gas Commission has granted a 20% discount to persons 65 years of age and over for residential use.

Capital Improvement Program

The rates proposed by PGW and approved by the Gas Commission also take into account the needs of PGW's capital improvement program (the "Capital Improvement Program") which generally is funded by the sale of revenue bonds and internally generated funds ("IGF"). Net proceeds of revenue bond sales are placed into restricted segregated accounts for the Capital Improvement Program and are requisitioned for expenditures as required for the Capital Improvement Program or to reimburse PGW for expenditures made in advance of issuance of Gas Works Revenue Bonds. For use of the proceeds of the Thirteenth Series Bonds, see "PLAN OF FINANCE AND ESTIMATED SOURCES AND USES OF PROCEEDS." PGW determines its capital improvement requirements from projected customer additions, pipeline gas availability, peak day gas requirements, enforced relocation due to highway and bridge construction and the need to maintain its plant and equipment in a safe, adequate and reliable manner. For further discussion of the Capital Improvement Program, see "1992 Capital Budget and Forecast" below and APPENDIX B - "Engineering Report".

The following table presents information regarding actual net capital expenditures for Fiscal Years 1986-1990 (together with Fiscal Year 1991 Estimates):

FISCAL YEAR NET CAPITAL EXPENDITURES (1)

(Dollar Amounts in Thousands)

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991 Estimated</u>
Gas Supply	\$ 2,839	\$ 3,294	\$ 6,124	\$ 6,320	\$ 6,763	\$10,035
Distribution	29,654	35,621	41,846	39,419	39,164	38,070
Customer Service	3,856	4,546	4,426	3,004	4,155	4,463
Other	<u>10,838</u>	<u>14,645</u>	<u>20,141</u>	<u>8,380</u>	<u>8,116</u>	<u>8,237</u>
Total	<u>\$47,187</u>	<u>\$58,106</u>	<u>\$72,537</u>	<u>\$57,123</u>	<u>\$58,198</u>	<u>\$60,805</u>
Internally Generated Funds to Fund Capital Improvements .	<u>\$ 6,200</u>	<u>\$21,100</u>	<u>\$19,400</u>	<u>\$ 8,200</u>	<u>\$17,300</u>	<u>-0-</u>

(1) Net of reimbursements, contributions and salvage.

Internally Generated Funds

PGW provides for a portion of capital costs to be funded through the use of IGF. IGF consist of funds generated by PGW net revenues after payment of City Charges which are available in part because of the level of debt service coverage established by the Gas Commission and achieved by PGW's operations. See "Debt Service Coverage Ratio" below. A decline in net revenues reduces IGF and requires that the shortfall be funded from the sale of additional revenue bonds. In Fiscal Year 1990, PGW generated \$17.3 million of IGF, which funded approximately 30% of the capital expenditures for that year. In Fiscal Years 1986-1989, IGF funded from a low of 13% to a high of 36% of the capital expenditures in said fiscal years.

In Fiscal Year 1991 IGF are not expected to be available to fund capital expenditures. While approximately \$9 million of IGF was budgeted for Fiscal Year 1991, the extraordinarily warm weather during Fiscal Year 1991 described in "PGW BUDGET, RATES AND FINANCING PROGRAM - Fiscal Year 1991 Operating Budget and Rate Proceedings" and "MANAGEMENT DISCUSSION AND ANALYSIS OF THE SUMMARY STATEMENTS OF INCOME" herein appear to have created a revenue shortfall which has eliminated all amounts which would otherwise constitute IGF.

Tax-Exempt Commercial Paper

PGW's short term financing needs are managed by the use of its tax-exempt commercial paper program. See "ADDITIONAL DEBT - Subordinated Short-Term Borrowings - Gas Works Notes." The Gas Works Notes are not subject to the Rate Covenant and provide financing flexibility to enable PGW to meet its current operating needs. PGW is authorized to issue up to \$85 million of Gas Works Notes.

At June 15, 1991 the amount of Gas Works Notes outstanding was \$81.3 million. The City expects to issue additional Gas Works Notes and anticipates that a total of \$83 million of Gas Works Notes may be outstanding by the end of August, 1991.

Gas Cost Rate

PGW's greatest expense is the cost of natural gas and raw materials. These costs are recovered through the operation of the Gas Cost Rate ("GCR") as authorized by the Gas Commission. The base rate established from time to time by the Gas Commission in its rate proceedings includes a fuel component cost. The GCR is designed to permit PGW on a quarterly basis to adjust its charge to residential customers to approximate its actual cost of fuel materials. PGW calculates its anticipated annual cost for fuel and allocates that cost to its customers on a levelized basis for payment during the fiscal year. GCR collections are then matched against actual costs for the year to date and the GCR is adjusted quarterly if necessary to credit or charge consumers in the upcoming period for overpayment or underpayment for fuel costs to date. For Fiscal Year 1991 the base cost of fuel raw materials included in the rates was \$3.18 per thousand cubic feet (Mcf) and the current GCR effective as of September 1, 1990 is a negative 17.5 cents per Mcf reflecting a credit on customers bills. The Gas Commission authorized the GCR to remain at negative 17.5 cents per Mcf in its Rate Order of February 5, 1991. See "Fiscal Year 1991 Operating Budget and Rate Proceedings" below.

Previous Rate Proceedings

On May 29, 1986, PGW filed a request for a base rate increase with the Gas Commission designed to produce net additional base revenues in the fiscal year commencing September 1, 1986 of \$59 million. On March 3, 1987, the Gas Commission granted a base rate increase, which became effective May 7, 1987, designed to produce net additional base revenues for the period January 1, 1987, through August 31, 1987, the fiscal year end, of \$28.6 million. On September 16, 1987, the Gas Commission ordered that the base rate be annualized to produce the same level of base revenues for the fiscal year ending August 31, 1988.

On June 3, 1988, PGW filed a rate request for a base rate increase with the Gas Commission designed to produce additional base revenues in the fiscal year commencing September 1, 1988 of \$49 million. On October 13, 1988, the Gas Commission rejected this request and established base rates reflecting a \$2 million reduction in base revenues, effective as of September 1, 1988. In connection with its rate decision of October 13, 1988, the Gas Commission suggested certain expense reductions which it estimated would allow PGW to meet its financial obligations and achieve a debt service coverage level estimated at 1.79. In response to this rate decision, PGW developed an operational plan for Fiscal Year 1989, which included extensive reductions in operating expenses. Personnel levels were reduced by PGW through attrition and the implementation of an early retirement program and actual results for Fiscal Year 1989 showed a decrease for personnel costs of 11.9% compared to the original budget for 1989. All other operating expenses were reviewed and selective reductions were implemented. Other reductions in operating expenses (excluding weather related raw materials) for such items as advertising, promotion, company dues and subscriptions and purchased services produced a 1.7% decrease in operating expenses from the original budget numbers. Although PGW did not achieve the debt service coverage level of 1.79 estimated by the Gas Commission on October 13, 1988, the foregoing initiatives and other measures did produce debt service coverage for Fiscal Year 1989 of 1.59.

In August 1989, PGW proposed an operating budget for Fiscal Year 1990 that included a base rate increase in Fiscal Year 1990 designed to produce additional revenues in such fiscal year of \$15,000,000. After informal discussion with Gas Commission representatives, PGW determined that a combination of further manpower expenditure reductions and institution of charges for customer services would enable PGW to design an operating budget requiring no base rate increase that would nevertheless satisfy the debt service coverage requirements imposed by the Rate Covenant and meet the operating needs of PGW. The budget reflected extensive operating and administrative adjustments made during the preceding two fiscal years, during which no base rate increases were implemented. The Fiscal Year 1990 Operating Budget as approved by the Gas Commission projected a debt service coverage ratio of

1.73. Actual operating results for Fiscal Year 1990 produced a debt service coverage ratio of 1.51. For information about rate proceedings concerning Fiscal Year 1991, see "Fiscal Year 1991 Operating Budget and Rate Proceedings" below.

The Fiscal Year 1990 Management Audit

In November 1989, PGW received a management audit report of its operations performed at the request of the Gas Commission by Schumaker & Company, a management consulting firm based in Ann Arbor, Michigan. The management audit included 149 recommendations to improve PGW's operations and financial results, which were accepted by the Gas Commission. The Gas Commission in November 1989 voted to implement immediately ten of those recommendations and appointed a task force to oversee implementation of 64 additional recommendations. Action plans have been developed by PGW for implementation of the majority of the remaining recommendations. Periodic reports on implementation of the action plans are made to the Gas Commission. PGW is currently preparing a progress report which it expects to file with the Gas Commission along with its proposed operating budget for Fiscal Year 1992.

Implementation of some of the recommendations may produce cost savings over time. Some of the recommendations entail the incurrence of costs. Estimating the amount and timing of costs and savings is difficult because many of the recommendations involve long-term projects such as computerization and the development of more sophisticated programs with respect to accounting, budgeting and forecasting and the redesign and redeployment of departmental resources. Whether any savings will result from such improvements is uncertain. Individual departments have included in their budgets and forecasts, both the costs and the savings expected as a result of the incremental initiation of these action plans.

Fiscal Year 1991 Operating Budget and Rate Proceedings

In May, 1990 PGW submitted its proposed operating budget for Fiscal Year 1991 to the Gas Commission for consideration. The proposed budget anticipated a debt service coverage ratio of 1.81. Included in the operating forecast prepared in connection with the operating budget for Fiscal Year 1991 was a proposed base rate increase intended to generate additional net revenues for PGW of \$31,000,000 during Fiscal Year 1991 (representing an increase of 6.5% over the projected Fiscal Year 1990 revenues). PGW has been able to defer a base rate increase since 1987 in part by instituting management efficiencies and by reducing operating expenses. The budget submitted by PGW reflected management's view that nearly all savings achievable by instituting additional cuts in expenditures had been achieved, and provided that after provision for cost savings a base rate increase of \$31 million was necessary to generate sufficient revenues to meet the Rate Covenant and other obligations.

PGW filed its request for a rate increase for Fiscal Year 1991 with the Gas Commission on June 29, 1990. Along with the requested rate increase, PGW recommended that the annual adjustment to the GCR reflect a 48.5 cent per Mcf credit. The Gas Commission combined the two requests into a single proceeding and on February 5, 1991 issued its rate order. In its rate order, the Gas Commission denied the requested \$31 million base rate increase but with respect to the GCR, the Commission increased the credit for customers to 17.5 cents per Mcf, a greater credit than the 6.55 cents per Mcf established in the prior year, but significantly less than the 48.5 cents per Mcf which had been recommended by PGW. This decrease in the GCR credit from the proposed level would have had the effect (on a normal weather budgetary basis) of increasing PGW's budgeted gas revenues for Fiscal Year 1991 by \$16 million.

PGW's operating budget for Fiscal Year 1991 was also approved by the Gas Commission on February 5, 1991. The approved budget projected a debt service coverage ratio of 1.81. However, as a result of the extremely warm heating season experienced in Fiscal Year 1991 (the warmest in approximately 60 years), PGW estimated operating revenues (as of May 31, 1991) to be approximately \$53.6 million below the budgeted level and operating income to be approximately \$28.5 million below the budgeted level. In the absence of additional budgetary action by PGW and the Gas Commission, these weather related revenue short-falls could have resulted in the debt service coverage ratio falling below

the level required in the Rate Covenant contained in the General Ordinance. However, to ameliorate this problem PGW has implemented a number of measures, including a hiring freeze, restrictions on overtime and adjustments of its interest earning assumption with respect to its pension plan investments. In addition, the Gas Commission has monitored PGW's operating results throughout the heating season and on May 22, 1991 modified its February 5, 1991 rate order by further reducing the base cost of fuel raw materials included in the base rates by an additional \$.15 per Mcf from \$3.33 per Mcf to \$3.18 per Mcf effective retroactive to September 1, 1990. PGW expects this modification to add approximately \$8.0 million to operating revenues in Fiscal Year 1991 and overall expects to achieve a debt service coverage ratio of 1.51 for Fiscal Year 1991.

Fiscal Year 1992 Operating Budget and Rate Proceeding

PGW's proposed Fiscal Year 1992 Operating Budget has been approved by the PFMC. PGW expects to file the Operating Budget and a request for a rate increase designed to produce additional net revenues of \$34,000,000 for Fiscal Year 1992 with the Gas Commission before the close of Fiscal Year 1991. PGW believes this proposed base rate increase is necessary to produce additional revenues sufficient to meet the anticipated requirements of PGW's Capital Improvement Program, operating expenses and debt service coverage ratio.

PGW's five year operating forecast also presumes an additional \$17 million base rate increase becoming effective in Fiscal Year 1995. The operating forecast also takes into account anticipated savings from implementation of the remaining recommendations of the management audit. The Fiscal Year 1992 operating budget and the Fiscal Years 1993-1996 operating budget forecasts are merely estimates which are subject to significant changes over time. There is no assurance that any rate increases proposed by PGW will be approved by the Gas Commission or implemented so as to produce the projected base rate revenue increases in the fiscal years as forecasted. Further, there can be no assurance that PGW, upon review of actual results will seek rate increases in the amounts and at the times described in this paragraph.

Debt Service Coverage Ratio

The annual operating budget approved by the Gas Commission estimates the level of revenues required to reach the debt service coverage ("DSC") ratio authorized by the Gas Commission. As shown below, during each of the last six fiscal years and in the current fiscal year PGW's actual operating results regularly have produced, or are expected to produce, a DSC ratio appreciably lower than the coverage estimated in the approved Operating Budget:

<u>Fiscal Year</u>	<u>DSC Ratio</u>	
	<u>Budget</u>	<u>Actual</u>
1985	1.99	1.75
1986	1.91	1.60
1987	2.00	1.87
1988	1.85	1.60
1989	1.79	1.59
1990	1.73	1.51
1991	1.81	1.51*

* Estimated.

The difference between budgeted debt service coverage and actual coverage is attributable to a variety of factors, including (a) shortfalls in revenue, and (b) differences between PGW and the Gas Commission in the calculation of certain expense items such as reserve for bad debts. The major reasons for the shortfalls in revenue are weather conditions which result in differences between budgeted and actual degree days and levels of interruptible sales and associated profit margins which depend on fuel oil prices. In order to compensate for these changes over which PGW has no control, PGW recommends a DSC ratio of approximately 1.80 to provide a margin of comfort. Certain cost cutting programs, based on assumptions about PGW's operations made by the Gas Commission during rate proceedings, are sometimes difficult to implement as planned, due to timing restraints and imple-

mentation costs and actual results of the implementation of Gas Commission orders may not have the effect on revenues and expenses anticipated by the Gas Commission. See also "HISTORICAL REVENUES AND DEBT SERVICE COVERAGE" below.

Sales

PGW's proposed operating budget for Fiscal Year 1992 anticipates total operating revenues of \$548,663,000 and assumes implementation of the \$34,000,000 rate increase discussed above. The forecast of sales is based on an analysis of historical usage patterns and utilizes a normal (average) weather pattern containing 4,600 degree days. Factors considered include the actual growth or decline in number of customers, changes in rates of consumption by customers in each rate classification, the existing and anticipated price advantage of natural gas over alternative fuels, the availability of natural gas, and the likelihood of PGW's participation in new construction and rehabilitation projects. The operating budget also includes anticipated Load Balancing Service (LBS) sales which are interruptible sales to industrial and commercial users. LBS sales are based upon the availability of gas for sale at a competitive price after the demand for gas by all other classes of customers has been satisfied.

Total sales are expected to increase by 7.4 bcf in Fiscal Year 1992 or 10.7 percent from Fiscal Year 1991. Steam system conversions are partially responsible for this projected growth. Annual firm sales for Fiscal Year 1992 are budgeted at 62.8 bcf, an increase of 7.0 bcf over Fiscal Year 1991. Although interruptible sales are difficult to estimate, PGW's Fiscal Year 1992 budget includes interruptible sales and Gas Transport of 13.8 bcf in Fiscal Year 1992, representing an increase of 3.1 percent from Fiscal Year 1991.

PGW anticipates that there will not be a significant increase in customers in the near future. The residential customer base will remain relatively stable despite the lack of growth in the City's population. Commercial and light industrial customer growth is expected to be stronger resulting from new construction, rehabilitation, conversion to gas from other sources and the introduction of new gas technologies such as air conditioning and, possibly, cogeneration. Included in PGW's sales forecast are the conversion of primarily commercial customers from the Philadelphia center city steam loop. PGW's Marketing Department estimates that approximately 35% of the steam loop will be converted to gas by 1994. To enhance this effort, PGW has recently begun to market gas-fired chiller/heaters rather than straight boiler conversions to this group of customers which would provide even greater savings to these customers relative to their current energy costs. Increases in interruptible sales are difficult to predict since they are partly opportunistic and depend on many factors outside PGW's control including the price of oil and the number of experienced heating degree days. Total PGW interruptible sales have fluctuated between 10.4 and 12.6 bcf/yr since Fiscal Year 1984. For discussion of PGW's sales in prior years, see "MANAGEMENT'S DISCUSSION AND ANALYSIS OF THE SUMMARY STATEMENTS OF INCOME."

1992 Capital Budget and Forecast

The PGW proposed Capital Budget for Fiscal Year 1992 and Forecast Years 1993 through 1997 was submitted to the Gas Commission on March 14, 1991. The Fiscal Year 1992 Capital Budget in the net amount of \$56.9 million, provides funds for the customary maintenance, construction and replacement items necessary to continue service to PGW's customers. Over 80% of the Fiscal Year 1992 Capital Budget and over 74% of the six-year forecast expenditures are for replacement of facilities to ensure continuing safe, reliable and adequate service. The balance of the projected expenditures are included to provide new and expanded gas service to present and future customers.

PGW's Distribution Department represents 65% of both the Fiscal Year 1992 Proposed Budget submission and the six-year total. Of these expenditures for mains, services and pressure and corrosion control facilities, approximately 82% represents replacement of existing facilities in the Fiscal Year 1992 Budget and Forecast Years.

The Gas Supply Department has presented a Fiscal Year 1992 Budget of \$8.7 million and a total for the six years of \$47.8 million. In light of City Council's recent approval of the 1991 Capital Budget, the proposed Gas Supply Department's capital budget for 1992 will be modified prior to submission to

City Council to delete approximately \$511,000 for items resubmitted in the 1992 proposal which were included in the 1991 Budget approved by City Council. In the six-year period, the Department is requesting 72% of the funds for replacements and 28% for additions.

The Customer Service Department's budget and forecast of \$38.7 million includes \$10.7 million for the continued funding of the soon to be initiated Automated Meter Reading Project. Additions represent 58% of its program forecast. Transportation and Other Departments have submitted a Fiscal Year 1992 Capital Budget of \$6.4 million and a six-year program of \$39.2 million. Replacements represent 82% of this total.

In accordance with the *Management Agreement*, PGW's Capital Budget must be submitted to the City Council with recommendations from the Director of Finance and the Gas Commission. The Gas Commission considered the Fiscal Year 1991 Capital Budget and recommended that the restoration of daily LNG vaporization capability proposed by PGW be deleted from the 1991 Capital Budget. The Director of Finance of the City has also reviewed the Fiscal Year 1991 Capital Budget and recommended that the approved budget leave intact PGW's proposed restoration of LNG capability to 450 MMcf. On June 6, 1991, City Council approved the 1991 Capital Budget in the amount of \$54,725,700. See APPENDIX B - "Engineering Report - Capital Improvement Program."

The Thirteenth Series Bonds are being issued by the City on behalf of PGW to pay for various capital expenditures. PGW's financial forecast for Fiscal Years 1991-1996 anticipates the issuance of the Thirteenth Series Gas Works Revenue Bonds in 1991, the Fourteenth Series Gas Works Revenue Bonds in 1992 and Fifteenth Series Gas Works Revenue Bonds in 1995, each in the aggregate principal amount of approximately \$75,000,000. PGW does not currently intend to issue bond anticipation notes during the remainder of Fiscal Year 1991 or Fiscal Year 1992.

PGW's proposed capital budget for Fiscal Year 1992 and its five-year forecast were filed with the Gas Commission on March 14, 1991. The City's Finance Director gave a favorable recommendation to the Gas Commission regarding PGW's proposed capital budget but did recommend that the Fiscal Year 1992 capital budget be reduced from \$56.9 million to a "more appropriate level not to exceed \$43 million".

The Gas Commission noted that PGW's proposed Fiscal Year 1992 budget of \$56.9 million includes \$35.2 million to be spent in Fiscal Year 1992. PGW also proposed carrying forward \$40.6 million of previously approved but not fully spent funds from prior years including \$20.4 million to be spent in Fiscal Year 1992, bringing the total spending for Fiscal Year 1992 to \$55.6 million. The Gas Commission recommended that City Council approve the \$55.6 million spending level and ordered PGW to change its accounting procedures to lapse funds associated with recurring or normal capital projects to which a firm commitment has not been made. The Gas Commission further recommended that PGW, in cooperation with the Public Advocate, Gas Commission, and Finance Director, develop a project list to allocate this capital authorization. To date City Council has not acted on the Gas Commission's recommendations regarding PGW's proposed capital budget for Fiscal Year 1992.

GAS SUPPLY AND REGULATION OF FEEDSTOCKS

PGW has contracts for natural gas with two major interstate pipeline companies which account for virtually all of PGW's gas supplies. In addition, it relies on pipeline storage gas deliveries under storage contracts with the same pipeline companies. It also owns and operates supplemental LNG and propane-air facilities to meet incremental demand in excess of pipeline and storage supplies. PGW's SNG facility is not presently in use for the production of gas. A preliminary decision has been made to discontinue maintenance on the unused portion of the plant. A decision on the most effective disposition/disposal of the unused portions of the plant will be made in the future. PGW's supplies of natural gas, LNG and propane-air are adequate to meet its projected demand under either normal or design (colder-than-normal) conditions through 1996. The price and supply of interstate natural gas and certain feedstocks for PGW gas manufacturing facilities are regulated by the Federal Energy Regulatory Commission. Pursuant to legislation included in the National Gas Policy Act, regulation of the price of interstate natural gas was phased out gradually and terminated on January 1, 1985.

SUMMARY STATEMENTS OF INCOME

The summary statements of income set forth below should be read in conjunction with the audited financial statements and notes included in Appendix A hereto.

	(Dollar Amounts in Thousands)					Seven Months Ended	
	Fiscal Years Ended August 31,					March 31, (2)	
	1986	1987	1988	1989	1990	1990	1991
Operating revenues	<u>\$477,127</u>	<u>\$456,443</u>	<u>\$469,567</u>	<u>\$472,706</u>	<u>\$472,172</u>	<u>\$367,657</u>	<u>\$354,321</u>
Operating expenses							
Natural gas	266,029	221,119	229,284	238,087	230,362	173,466	156,977
Other raw materials ...	1,003	1,814	549	(155)	1,037	1,012	512
Gas processing	18,726	18,899	24,062	24,565	24,353	14,858	12,631
Customer service	20,306	20,858	20,786	20,382	19,229	12,451	11,791
Distribution	13,411	14,350	16,562	16,244	20,588	12,886	10,516
Customer activities	47,309	51,449	51,186	46,652	51,144	34,257	35,392
Administrative and gen- eral	25,068	26,112	28,413	27,185	26,989	17,106	17,434
Pensions	17,571	16,763	17,016	21,497	17,748	11,350	11,208
Taxes	5,430	5,808	6,398	5,831	6,153	3,756	3,695
Depreciation	<u>14,553</u>	<u>19,462</u>	<u>21,155</u>	<u>19,015</u>	<u>18,872</u>	<u>11,296</u>	<u>11,994</u>
Total operating expenses .	<u>429,406</u>	<u>396,634</u>	<u>415,411</u>	<u>419,303</u>	<u>416,475</u>	<u>292,438</u>	<u>272,150</u>
Operating income	47,721	59,809	54,156	53,403	55,697	75,219	82,171
Other income	<u>15,643</u>	<u>12,295</u>	<u>15,940</u>	<u>12,858</u>	<u>11,880</u>	<u>7,554</u>	<u>7,861</u>
Income before interest exp.	63,364	72,104	70,096	66,261	67,577	82,773	90,032
Interest expense	<u>44,244</u>	<u>44,125</u>	<u>48,575</u>	<u>47,736</u>	<u>49,007</u>	<u>28,713</u>	<u>30,764</u>
Net income (1)	<u>\$ 19,120</u>	<u>\$ 27,979</u>	<u>\$ 21,521</u>	<u>\$ 18,525</u>	<u>\$ 18,570</u>	<u>\$ 54,060</u>	<u>\$ 59,268</u>

(1) Net income is before payment of the \$18,000,000 Base Payment portion of City Charges.

(2) Provided by PGW Management. Interim results are not necessarily indicative of year-end results as certain revenues and expenses are seasonal.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF THE SUMMARY STATEMENTS OF INCOME

General Considerations

During the five fiscal years ended August 31, 1990 (presented in the foregoing Summary Statements of Income), PGW experienced slightly fluctuating natural gas sales caused, in part, by varying winter weather conditions, conservation efforts on the part of PGW's customers and a reduction in the number of customers PGW serves. PGW's annual sales of natural gas varied from a high of 75.4 billion cubic feet (bcf) in 1988 to a low of 71.3 bcf in 1987.

Other major factors which influenced natural gas sales and overall financial results during this period include: (i) volatility of natural gas costs to PGW; and (ii) concurrent decreases in the cost of alternative fuels such as oil which resulted in reduced demand and profit margins for interruptible sales (see "Five Year Summary of Gas Sales" below).

Five Year Summary of Gas Sales

Total gas sales for PGW can be described as sales to firm or interruptible customers. Firm customers receive gas service under various schedules which anticipate no interruptions in delivery of natural gas. Firm service is sold to residential, commercial and industrial customers depending on the type of service required and represented 86% of total gas sales as of the end of Fiscal Year 1990. Interruptible service is offered to customers, under schedules or contracts which anticipate and permit interruptions on short notice, generally in peak-load periods. Interruptible service is sold to high volume commercial and industrial customers and represented 14% of total gas sales in Fiscal Year 1990. (See "SELECTED OPERATING DATA" below for a five year summary of gas sales).

Temperatures during the 1986 heating season were slightly warmer than normal.* Sales to firm customers, representing 84% of gas sold, totaled 60.4 bcf. Revenues from gas sales in Fiscal Year 1986 totaled \$471.5 million, 3.6% less than the prior year, as a result of a decline in the GCR. Firm revenues decreased by \$7.8 million as the impact of additional sales of 2.0 bcf were more than offset by the downward adjustment in the GCR. Gas sales to interruptible customers were 11.5 bcf, virtually unchanged from the previous year, while revenues declined by \$10.4 million from the 1985 level due to competitive oil prices which declined sharply over the year thereby reducing profit margins.

Fiscal Year 1987 resulted in total gas sales of 71.3 bcf, a decrease of .6 bcf from the previous year. Temperatures during the 1987 heating season were slightly warmer than the 1986 heating season and 2% warmer than a normal heating season. Sales to firm customers, representing 85% of gas sold, totaled 61.0 bcf in 1987. This higher level of firm sales was principally due to additional residential sales. The demand for gas service by interruptible customers declined by 1.1 bcf from the prior year, to a level of 10.3 bcf. Total revenues from gas sales in fiscal Year 1987 amounted to \$450.8 million, 4.4% less than the preceding year. Firm revenues declined by \$9.2 million as downward adjustments in the fuel component of the base rate and the GCR more than offset additional sales and the approved \$28.65 million rate increase. Interruptible revenues declined by \$11.5 million from the 1986 level due to competitive oil prices.

For the 1988 Fiscal Year, gas sales totaled 75.4 bcf, 4.1 bcf higher than the 1987 Fiscal Year. Slightly cooler than normal temperatures during the heating season produced 4,676 degree days, an increase of 76 degree days or 2% greater than normal and 178 degree days or 4% greater than experienced in the prior year. Sales to firm customers of 62.8 bcf were 1.9 bcf higher than experienced in 1987 due to increased heating demand. Interruptible gas sales increased 21% to 12.6 bcf. Associated interruptible revenues increased 18.5% as movement of alternate fuel prices reduced profit margins.

Gas sales in Fiscal Year 1989 totaled 72.5 bcf, a decrease of 2.9 bcf from the prior year. Temperatures during the 1989 heating season were slightly warmer than normal resulting in 4,579 degree days, a decline of 21 from normal and 97 degree days or 2% less than experienced in 1988. Sales to firm customers of 62.0 bcf were down .8 bcf from the previous year. Associated interruptible revenues decreased by 10.7% to \$36.1 million as competition from alternative fuels lowered demand for gas service.

* A "normal year" is 4,600 degree days.

In Fiscal Year 1990 gas sales totaled 71.7 bcf a decrease of .8 bcf from the previous year. Temperatures during the 1990 heating season were slightly warmer than during the 1989 heating season, totaling 169 degree days or 3.7% below the normal level. Sales to firm customers were 61.5 bcf, down .5 bcf from the 1989 level reducing revenues by \$3.7 million. This decrease is mainly attributable to the impact of the warmer temperatures on residential heating customers. Sales to interruptible customers declined moderately from 10.5 to 10.2 bcf reflecting both reduced customer demand and cold weather curtailments during the heating season. However, revenues for interruptible customers increased 8.5% to \$39.1 million on improved margins.

Natural Gas

Natural gas expenses decreased by \$23.0 million or 8% in Fiscal Year 1986 to \$266 million as the result of lower pipeline prices and purchases on the spot market. These savings were offset, in part, by deferred pipeline charges of \$11.5 million as approved by the Federal Energy Regulatory Commission, and increased sendout.

In Fiscal Year 1987, natural gas expenses were further decreased by \$44.9 million or 17% from the 1986 Fiscal Year level. This was again a result of lower pipeline prices and purchases on the spot market combined with reduced sendout. Also, the payment of deferred pipeline charges approved by the Federal Energy Regulatory Commission was \$11.3 million lower in Fiscal Year 1987.

In Fiscal Year 1988, natural gas increased \$8.2 million over the 1987 level due to the cost of meeting the increased sendout requirement and the initiation of deferred fuel accounting. The deferral of the application of \$6.7 million of refunds received from pipeline suppliers into the 1989 Fiscal Year coupled with the increased sendout more than offset savings resulting from lower natural gas prices and the economies of spot gas market purchases.

In Fiscal Year 1989, natural gas expenses rose by \$8.8 million or 4% from the previous year's level primarily due to higher pipeline supplier prices. The higher costs were offset, in part, by lower sendout requirements and the application of refunds deferred from the 1988 Fiscal Year.

Natural gas expense for Fiscal Year 1990 indicates a decrease of \$7.7 million or 3% from the 1989 Fiscal Year level. This decrease was attributable to lower pipeline prices and reduced sendout requirements stemming from warmer heating season needs.

Accounts Receivable

High accounts receivable balances and a large number of delinquent accounts have troubled PGW for several years. The Philadelphia Gas Commission (PGC), through its regulatory review and orders, seeks to obtain a balance between the concerns of PGW, the City and the customers with an increasing emphasis on the needs of the low-income customer. Consequently PGW has taken a proactive position in assisting customers in meeting energy costs. PGW has been active in various City communities in promoting its Conservation Works Program. It has also actively promoted customer financial assistance in meeting energy costs through programs funded from both governmental and private sources.

As the result of these activities the financial assistance programs provided a total of \$14.2 million in aid to customers in the 1990 Fiscal Year.

In addition, PGW maintains the following programs to assist customers in meeting past obligations:

- Forgiveness Repayment Agreements – (5%-2% Agreements) permit customers meeting income eligibility tests to enter into an agreement initially paying 5% of account arrearages and monthly current gas usage plus 2% monthly of the initial arrears. This program offers a potential for a maximum forgiveness of 50%.
- 20% Repayment Agreements – offered to customers whose household income is above 150% of the poverty level – provides for a 20% initial payment of past due amount with the remaining amount to be paid over a maximum of 24 months.

As of August, 1990, there were 37,835 delinquent customers who had "five and two" percent repayment agreements, of which 17,917 were currently active with a total receivable balance of \$14.3 million. There were 76,852 delinquent customers which had 20% repayment agreements, 29,945 of which were active with a total receivable balance of \$11.9 million. The total amount of active outstanding accounts under these two repayment plans was 30% of total Gas Accounts Receivable at August, 1990. Starting in 1985, PGW increased the reserve for uncollectible accounts to provide for account reinstatements under the two repayment plans.

In the summer of 1988, PGW petitioned the PGC to modify the Customer Service Regulations. Rather than litigate the issues, PGW and Community Legal Services (CLS), acting as the Public Advocate, entered into settlement negotiations. As a result of this action, a joint proposal was developed which was submitted to and approved by the PGC.

Included in the settlement agreement is a two year pilot program known as the Energy Assurance Program (EAP). This percentage of income plan is offered to customers whose household income is at or below 150% of the federal government poverty guidelines. Instead of paying the actual cost of the gas, the customers pay only a set percentage, based on the household's gross monthly income, toward their current usage. The percentage they are asked to pay depends on their level of income. Customers are also asked to pay \$4.00 a month toward their arrearages. The shortfall between current usage and the percentage of income payment will be written off monthly. After a three-month history of payment compliance is established, a proportional amount of the arrearages will be written off monthly. Through mid March, 1991, approximately 5,300 customers have met the program requirements and have been enrolled on the EAP Plan. On February 5, 1991 the PGC expanded this program to include an additional 10,000 customers.

The Conservation Works is the weatherization energy conservation segment of EAP. Savings in gas energy usage of up to 20% are anticipated.

The status of Accounts Receivable during the 1986 to 1990 period is reflected in the following table:

**ACCOUNTS RECEIVABLE, ACCUMULATED PROVISIONS FOR UNCOLLECTIBLE
ACCOUNTS, WRITE-OFFS OF ACCOUNTS RECEIVABLE, DELINQUENT
CUSTOMERS, AND REVENUE STATISTICS**

	(Dollar Amounts in Thousands)				
	Fiscal Years Ended August 31				
	1986	1987	1988	1989	1990
Billed gas revenues during the year	\$473,703	\$452,432	\$462,226	\$469,569	\$470,110
Accounts receivable at August 31 .	\$ 92,061	\$ 94,441	\$ 83,734	\$ 87,994	\$ 91,215
Accumulated provisions for uncol- lectible accounts at August 31 . .	\$ 39,358	\$ 41,639	\$ 40,851	\$ 39,181	\$ 41,053
Net accounts receivable at August 31	\$ 52,703	\$ 52,802	\$ 42,883	\$ 48,813	\$ 50,162
Accumulated provisions for uncol- lectible accounts as a percentage of accounts receivable (%)	42.8	44.1	48.8	44.5	45.0
Write-offs during the year*	\$ 13,159	\$ 20,496	\$ 20,874	\$ 20,920	\$ 22,137
Receivables as a percentage of billed gas revenues during the year (%)	19.43	20.87	18.11	18.74	19.40
Delinquent customers (annual av- erage)	153,086	156,387	148,588	141,095	133,510
Delinquent customers at August 31	135,394	148,670	124,543	121,462	116,882

* Net write-off.

Write-off of Uncollectible Accounts

In Fiscal Years 1986, 1987, 1988, and 1989, in recognition of the substantial number of reactivated gas accounts resulting from the two repayment plans, the reserve was increased to \$39.4 million and \$41.6 million and decreased slightly to \$40.9 million and \$39.2 million respectively, while the amount written off, net of reactivations, was \$13.2 million in 1986, \$20.5 million in 1987 and \$20.9 million in both 1988 and 1989. In Fiscal Year 1990, net customer accounts receivable of \$22.1 million were written off while the reserve balance increased slightly to \$41.1 million.

The following table presents information regarding the aging of Gas Accounts Receivable of PGW at August 31, 1990 and August 31, 1989:

AGING ANALYSIS OF GAS ACCOUNTS RECEIVABLE

(Dollar Amounts in Thousands)						
August 31, 1990						
<u>Customer Receivables</u>	<u>Current</u>	<u>30 Days</u>	<u>60 Days</u>	<u>90 Days & Over</u>	<u>Total Gas Accounts Receivable</u>	<u>Delinquent Accounts</u>
Residential and small commercial.....	\$23,042	\$3,720	\$3,402	\$36,926	\$67,090	\$44,048
Industrial and large commercial.....	3,508	779	557	2,489	7,333	3,825
Final billing (a).....	<u>2,371</u>	<u>4,009</u>	<u>4,085</u>	<u>5,992</u>	<u>16,457</u>	<u>14,086</u>
Total.....	<u>\$28,921</u>	<u>\$8,508</u>	<u>\$8,044</u>	<u>\$45,407</u>	<u>\$90,880(b)</u>	<u>\$61,959(b)</u>

(Dollar Amounts in Thousands)						
August 31, 1989						
<u>Customer Receivables</u>	<u>Current</u>	<u>30 Days</u>	<u>60 Days</u>	<u>90 Days & Over</u>	<u>Total Gas Accounts Receivable</u>	<u>Delinquent Accounts</u>
Residential and small commercial.....	\$20,313	\$ 3,333	\$3,429	\$33,029	\$60,104	\$39,791
Industrial and large commercial.....	3,532	1,361	591	2,095	7,579	4,047
Final billing (a).....	<u>4,083</u>	<u>6,181</u>	<u>4,692</u>	<u>3,770</u>	<u>18,726</u>	<u>14,643</u>
Total.....	<u>\$27,928</u>	<u>\$10,875</u>	<u>\$8,712</u>	<u>\$38,894</u>	<u>\$86,409(b)</u>	<u>\$58,481(b)</u>

(a) Gas service on these accounts has been terminated. Amounts include voluntary and involuntary termination.

(b) This amount represents Gas Accounts Receivable and does not include other miscellaneous Accounts Receivable which would be included in the Accounts Receivable figures on the preceding chart.

Seven Months Fiscal Period Ended March 31, 1991 Compared to Seven Months Fiscal Period Ended March 31, 1990.

Gas sales for the seven months ended March 31, 1991 were 50.8 bcf, 1.3 bcf or 2.6% less than experienced in the similar period in 1990. Sales to non-heating customers increased by 2.2 bcf as a significant increase in sales to interruptible customers more than offset reduced sales to non-heating firm customers. Gas sales to heating customers of 37.9 bcf were 3.5 bcf or 8.5% less than the 1990 level. This reduction is due principally to the extremely warm heating season experienced in Fiscal Year 1991 which has reduced degree days to 3,547 down 417 from the 1990 level and 603 or 14.5% below the normal level.

Operating revenues for the 1991 period were \$13.3 million less than those of the prior year. Non-heating revenues were \$2.9 million less than 1990. This decrease was more than offset by increased interruptible customer demand and higher unit prices of sales which increased interruptible revenues by \$13.8 million. Revenues from heating customers declined from the 1990 level by \$24.2 million reflecting the impact of the warmer heating season.

Operating expenses for the seven months ended March 31, 1991 were \$272.2 million, down \$20.3 million or 6.9% from the 1990 expense level. Reduced sendout requirements due to the warm temperatures and lower prices from suppliers coupled to lower natural gas expenses \$16.5 million. Milder weather conditions also contributed to decreased operating and maintenance costs in almost all departmental areas. The appropriation for uncollectible gas accounts increased by \$1.1 million. Administrative and general expenses increased by \$.3 million reflecting increased appropriations for injuries and damages and the reduced allocation of these expenses to capital projects while depreciation increased due to the larger average plant balances. See "SUMMARY STATEMENT OF INCOME" herein.

Interim results are not necessarily indicative of year end results because certain revenues and expenses are seasonal.

Subsequent Financial Results

Total operating revenues for the month of April, 1991 were \$36.1 million, \$4.7 million less than the same period in 1990 due to reduced revenue producing degree days.

Total operating expenses were \$28.6 million for the month of April, 1991, \$.6 million less than those recorded in April, 1990. These reduced expenses are principally the result of reduced natural gas purchases, again due to reduction in degree days.

Interest expense was \$.6 million greater than in April, 1990 reflecting interest expense on the most recent bond issue and the reduced allocation of these costs to capital projects.

Net earnings of \$2.6 million from operations in April, 1991 were \$4.7 million less than experienced in April, 1990 and a \$.5 million improvement on the net earnings forecasted for the period.

Due to the decrease in revenue producing degree days, May, 1991 gas sales including unbilled sales, were 17% below the May, 1990 level reducing total operating revenues by \$3.3 million. Operating expenses were \$1.3 million below the prior year level as natural gas costs declined \$1.7 million due to reduced sendout requirements and the appropriation for uncollectible accounts was raised \$.3 million. Also, interest expense increased \$.7 million over the May, 1990 level reflecting principally the impact of recent bond sales.

The net loss for the month of May 1991 was \$2.7 million greater than experienced in May 1990. However, PGW anticipates that it will achieve the debt service coverage ratio required by the rate covenant.

Interim results are not necessarily indicative of year end results because certain revenues and expenses are seasonal.

SELECTED OPERATING DATA

The following data is based upon the records of PGW. For further information, see "APPENDIX A - Audited Financial Statements of Philadelphia Gas Works for the Years Ended August 31, 1990 and 1989."

SELECTED OPERATING DATA					
(Dollar Amounts in Thousands)					
Fiscal Years Ended August 31,					
	1986	1987	1988	1989	1990
DEGREE DAYS	4,536	4,498	4,676	4,579	4,431
% of normal (4,600 degree days)	99	98	102	99	96
MAXIMUM 24-HOUR SENDOUT (mcf)	571,751	600,858	596,889	576,771	649,033
Peak-day avg. temperature (degrees)	20	14	14	17	12
GAS REVENUES & SALES BY CUSTOMER CLASSIFICATION					
Gas operating revenues (\$ 000 omitted)					
Residential:					
Heating	\$306,824	\$301,984	\$306,008	\$313,722	\$309,265
Non-heating	30,090	28,021	26,614	25,836	25,334
Industrial and Commercial:					
Firm	66,370	64,725	65,028	70,134	72,619
Interruptible	45,628	34,100	40,410	36,077	39,139
Other gas revenues (municipal, Phila. Housing Authority ("PHA"), sales for resale and unbilled revenues)	22,630	21,988	26,212	21,211	19,744
Total gas revenues	\$471,542	\$450,818	\$464,272	\$466,980	\$466,101
Other operating revenues	5,585	5,625	5,295	5,726	6,071
Total operating revenues	\$477,127	\$456,443	\$469,567	\$472,706	\$472,172
Other income	15,643	12,295	15,940	12,858	11,880
Total revenues and other income	<u>\$492,770</u>	<u>\$468,738</u>	<u>\$485,507</u>	<u>\$485,564</u>	<u>\$484,052</u>
SUMMARY OF CUSTOMERS AT END OF PERIOD					
Residential	499,608	496,836	497,227	497,596	494,253
Industrial and Commercial:					
Firm	18,840	19,015	19,513	20,242	24,630
Interruptible	164	193	259	302	321
Municipal and PHA	2	2	2	2	2
Total Customers	<u>518,614</u>	<u>516,046</u>	<u>517,001</u>	<u>518,142</u>	<u>519,206</u>
GAS SALES BY CLASSIFICATION (mmcf)					
Residential:					
Heating	43,525	44,268	45,838	45,376	44,612
Non-heating	3,956	3,790	3,667	3,354	3,285
Industrial and commercial:					
Firm	9,347	9,398	9,670	9,805	10,126
Interruptible	11,453	10,362	12,584	10,550	10,238
Other	3,576	3,520	3,667	3,448	3,462
Total gas sales	<u>71,857</u>	<u>71,338</u>	<u>75,426</u>	<u>72,533</u>	<u>71,723</u>
SUPPLY AND DISPOSITION OF GAS (mmcf)					
Natural gas purchased	75,383	73,944	78,178	73,769	73,782
Liquid petroleum	141	89	110	29	113
Liquefied natural gas	2,596	1,760	2,620	1,626	3,108
Total supply	<u>78,120</u>	<u>75,793</u>	<u>80,908</u>	<u>75,424</u>	<u>77,003</u>
Deduct:					
Additions to (withdrawals from) gas storage	967	75	2,502	(1,435)	1,426
PGW's use and other	5,296	4,380	2,980	4,326	3,854
Total gas sales	<u>71,857</u>	<u>71,338</u>	<u>75,426</u>	<u>72,533</u>	<u>71,723</u>
AVERAGE MONTHLY USAGE OF RESIDENTIAL CUSTOMERS (mcf)					
Heating	9.2	9.2	9.5	9.5	9.4
Non-heating	2.9	2.9	2.9	2.7	2.8
AVERAGE MONTHLY BILL OF RESIDENTIAL CUSTOMERS					
Heating	\$ 67.72	\$ 66.77	\$ 66.10	\$ 68.26	\$ 67.91
Non-heating	\$ 23.08	\$ 22.39	\$ 21.76	\$ 21.01	\$ 21.98

HISTORICAL REVENUES AND DEBT SERVICE COVERAGE

The financial operations for the years ended August 31, 1986 through 1990 and the revenues available for debt are shown in the following table:

	(Dollar Amounts in Thousands) Fiscal Years Ended August 31				
	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Operating revenues	\$477,127	\$456,443	\$469,567	\$472,706	\$472,172
Other income	<u>15,643</u>	<u>12,295</u>	<u>15,940</u>	<u>12,858</u>	<u>11,880</u>
Total revenues	492,770	468,738	485,507	485,564	484,052
Adjustments	<u>2,124</u>	<u>527</u>	<u>1,837</u>	<u>1,581</u>	<u>2,570</u>
Project revenues	<u>494,894</u>	<u>469,265</u>	<u>487,344</u>	<u>487,145</u>	<u>486,622</u>
Operating expenses	429,406	396,634	415,411	419,303	416,475
Less: depreciation	16,634	21,707	23,615	21,887	22,155
other adjustments	<u>276</u>	<u>(563)</u>	<u>(497)</u>	<u>1,662</u>	<u>489</u>
Net operating expenses	<u>412,496</u>	<u>375,490</u>	<u>392,293</u>	<u>395,754</u>	<u>393,831</u>
Net revenues	<u>82,398</u>	<u>93,775</u>	<u>95,051</u>	<u>91,391</u>	<u>92,791</u>
Debt service requirements:					
Revenue bonds	51,597	50,193	59,473	57,326	61,654
General obligation bonds issued for PGW*	2,549	1,729	-	-	-
Commercial paper notes	<u>4,018</u>	<u>3,645</u>	<u>5,204</u>	<u>4,668</u>	<u>4,361</u>
Total Debt Service	<u>58,164</u>	<u>55,567</u>	<u>64,677</u>	<u>61,994</u>	<u>66,015</u>
Net project revenues available for other purposes	<u>\$ 24,234</u>	<u>\$ 38,208</u>	<u>\$ 30,374</u>	<u>\$ 29,397</u>	<u>\$ 26,776</u>
Debt service coverage:					
Revenue bonds	1.60x	1.87x	1.60x	1.59x	1.51X
Revenue bonds and general obligation bonds	1.52x	1.81x	1.60x	1.59x	1.51X

*General obligation bonds matured in 1987 Fiscal Year.

Future Debt Service.

The following table presents year-by-year debt service requirements of the Thirteenth Series Bonds, the previously issued Gas Works Revenue Bonds (First through Eleventh Series A, B and C and the Twelfth Series A and B) excluding the refunded portions thereof. The table excludes the debt service on the Gas Works Notes and the Lease Revenue Bonds.

DEBT SERVICE REQUIREMENTS GAS WORKS REVENUE BONDS

<u>Fiscal Year Ending (Aug. 31)</u>	<u>Existing Debt Service Gas Works Revenue Bonds</u>	<u>Debt Service on the Thirteenth Series Bonds</u>	<u>Total</u>
1991	\$67,803,946		\$67,803,946
1992	68,472,673	\$6,472,253	74,944,926
1993	68,437,103	6,473,003	74,910,106
1994	68,426,706	6,472,123	74,898,829
1995	68,401,654	6,475,930	74,877,584
1996	65,697,154	6,473,485	72,170,639
1997	61,566,039	6,470,935	68,036,974
1998	56,858,854	6,472,805	63,331,659
1999	50,165,931	6,473,245	56,639,176
2000	45,709,536	6,471,740	52,181,276
2001	45,716,271	6,472,760	52,189,031
2002	34,321,651	6,475,385	40,797,036
2003	34,320,076	6,472,195	40,792,271
2004	34,308,096	6,475,535	40,783,631
2005	34,051,728	6,474,250	40,525,978
2006	34,036,081	6,472,955	40,509,036
2007	34,018,232	6,470,880	40,489,112
2008	33,991,956	6,472,255	40,464,211
2009	33,974,281	6,475,925	40,450,206
2010	33,942,519	6,475,735	40,418,254
2011	34,316,115	6,475,915	40,792,030
2012	34,319,944	6,475,310	40,795,254
2013	34,339,563	6,472,765	40,812,328
2014	23,010,032	6,472,125	29,482,157
2015	22,993,763	6,471,850	29,465,613
2016	14,712,469	6,475,400	21,187,869
2017	14,708,994	6,475,850	21,184,844
2018	6,033,450	6,471,660	12,505,110
2019	6,033,700	6,471,290	12,504,990
2020	6,034,800	6,472,430	12,507,230
2021		6,472,770	6,472,770

INSURANCE

PGW is principally insured through insurance carriers. PGW's property is insured against the risk of loss or damage, without aggregate limits, in the amount of \$250 million per occurrence with a \$100,000 deductible; subject, however, to an annual aggregate limit of \$100 million for earthquake and an annual aggregate limit of \$50 million for flood, generally, and to lower flood limits as to the Richmond Plant. In addition, PGW maintains boiler and machinery, blanket crime, and other forms of property insurance. With respect to incidents arising on or after October 1, 1986, PGW has maintained policies of liability insurance insuring against the risk of damage or injury to the public for \$25 million in excess of \$500,000 for any one incident, generally without aggregate limits, and for incidents exceeding the foregoing coverage, there is aggregate coverage of \$175 million. PGW also maintains \$25

million of workers' compensation insurance in excess of \$500,000 per incident for on-duty injuries to employees. A reserve is also maintained to cover current estimated losses which are excluded from coverage under the deductible provisions of the liability insurance policies. Charges against the reserve are made as claims are settled.

LITIGATION

A gas explosion in Fiscal Year 1979 resulted in personal injury, deaths and substantial property damage. Claims related to this incident have been made against PGW. Certain of the claims are for punitive damages, which may be outside the scope of PGW liability insurance coverage, which has a \$500,000 deductible. PGW is not presently aware of any facts which would give rise to awards for punitive damages. PGW anticipates that these claims will be settled for an amount less than \$500,000.

PGW is a defendant in two additional cases arising from explosions in which damage claims exceed the \$500,000 deductible. PGW's liability would be limited in each case to its \$500,000 deductible.

Three explosions occurred in 1988, as a result of which claims for property damage and personal injury for two occurrences are expected to exceed \$500,000; claims for property damage and personal injury for the other remaining occurrence is expected to be less than \$500,000. PGW's potential liability in each occurrence is limited to its \$500,000 deductible.

One explosion in 1989 and one in 1990 are each expected to generate claims exceeding PGW's insurance deductible limit of \$500,000. Two other explosions in 1990 are expected to generate claims below the \$500,000 deductible limit.

UNDERWRITING

The Underwriters have jointly and severally agreed, subject to certain terms and conditions, to purchase the Thirteenth Series Bonds from the City at a purchase price of \$74,057,268.18 (including underwriter's discount of \$942,581.82 and an original issue discount of \$220,150.00) plus accrued interest. The Underwriters' obligations are subject to certain conditions precedent, and they will be obligated to purchase all of the Thirteenth Series Bonds if any are purchased. The Thirteenth Series Bonds may be offered and sold to certain dealers and others at prices lower than the offering price stated on the cover page hereof, and such public offering price may be changed, from time to time, by the Underwriters without prior notice.

RATINGS

The long-term indebtedness of the Gas Works is currently rated Baa1 by Moody's Investors Service, BBB by Standard and Poor's Corporation and A by Fitch. The Gas Works received written notice of a downgrade from A- to BBB from Standard & Poor's Corporation on September 17, 1990. The Gas Works received written notice of a downgrade from A to Baa1 from Moody's Investors Service on May 17, 1991.

Any explanation concerning the significance of such ratings must be obtained from the rating agencies. Certain information and materials concerning the Thirteenth Series Bonds were furnished to the rating agencies by PGW, the City and others. If, in their judgment, circumstances so warrant, the rating agencies may lower or withdraw their respective ratings. There is no assurance that the ratings stated above will continue for any period of time or that they will not be revised or withdrawn. Should a downward change or withdrawal of either rating occur, it could have an adverse effect on the liquidity and the market price of the Thirteenth Series Bonds in the secondary market.

FEDERAL TAX EXEMPTION

General

In the opinion of Bond Counsel, under existing statutes, regulations, rulings and court decisions, interest on the Thirteenth Series Bonds, including original issue discount on the Thirteenth Series Bonds maturing on June 15, 2021 (the "OID Bonds"), is not includable in the gross income of the

holders thereof for federal income tax purposes and is not a specific preference item for purposes of computing the alternative minimum tax imposed on individuals and corporations. However, interest on the Thirteenth Series Bonds paid or accrued during any period any Thirteenth Series Bond is held by a corporation may be subject to alternative minimum tax and the environmental tax imposed under the Internal Revenue Code of 1986, as amended ("Code"), due to the adjustment for adjusted current earnings provided for in the Code. In addition, interest on the Thirteenth Series Bonds received or accrued in any taxable year by certain foreign corporations may be included in computing the "dividend equivalent amount" of such corporations subject to the branch profits tax imposed on such corporations under Section 884 of the Code. Further, interest on the Thirteenth Series Bonds may be subject to federal income taxation under Section 1375 of the Code for S corporations which have Subchapter C earnings and profits at the close of the taxable year if greater than 25% of the gross receipts of such S corporations is passive investment income.

Ownership of the Thirteenth Series Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, property and casualty insurance companies, individual recipients of Social Security or Railroad Retirement benefits, and taxpayers, including banks, thrift institutions and other financial institutions subject to Section 265 of the Code, who may be deemed to have incurred or continued indebtedness to purchase or to carry the Thirteenth Series Bonds. Bond Counsel express no opinion as to any of such consequences, and prospective purchasers of the Thirteenth Series Bonds who may be subject to such collateral consequences should consult their own tax advisors.

In rendering their opinion, Bond Counsel has assumed continuing compliance by the City with certain covenants that are intended to comply with the provisions of the Code relating to actions to be taken by the City in respect of the Thirteenth Series Bonds after the issuance thereof to the extent necessary to effect or maintain the federal tax-exempt status of the interest on the Thirteenth Series Bonds. These covenants relate to, inter alia, the use of and investment of proceeds of the Thirteenth Series Bonds and the rebate to the United States Treasury of specified arbitrage earnings, if any. Failure of the City to comply with such covenants could result in the interest on the Thirteenth Series Bonds becoming subject to federal income tax from the date of issue.

Tax Accounting Treatment of Original Issue Discount

For federal tax purposes, interest on Thirteenth Series Bonds includes original issue discount on the OID Bonds. Original issue discount is, generally, equal to the excess of the stated principal amount due at maturity of an OID Bond over the initial offering price to the public (not including bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters or wholesalers) at which price a substantial amount of OID Bonds of the same maturity were sold.

Original issue discount is accrued over the term to maturity of each OID Bond on the basis of a constant yield to maturity compounded at the end of each period of six (30-day) months (or shorter period from the date of purchase) ending on a day in each calendar year corresponding to the maturity date of such OID Bond or the date six (30-day) months before or after that date, with straight-line interpolations between compounding dates. The original issue discount is added to the holder's adjusted basis of such OID Bond to determine taxable gain or loss upon disposition (including sale or payment at maturity or redemption).

Owners of OID Bonds should consult their own tax advisors with respect to the computation of original issue discount on such accruals of interest during the period in which such OID Bonds are held.

PENNSYLVANIA TAX EXEMPTION

Under the laws of the Commonwealth of Pennsylvania, as presently enacted and construed, the Thirteenth Series Bonds are exempt from personal property taxes in Pennsylvania and the interest on the Thirteenth Series Bonds and any gain from the sale thereof are exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax.

CERTAIN LEGAL MATTERS

All legal matters incident to the authorization, issuance and sale of the Thirteenth Series Bonds are subject to the approval of the legality of the issuance of the Thirteenth Series Bonds by Astor, Weiss & Newman of Philadelphia, Pennsylvania, Bond Counsel. The proposed form of such opinion is included herein as Appendix F. Certain legal matters will be passed upon for the Underwriters by Saul, Ewing, Remick & Saul and Genece E. Brinkley, Esquire, both of Philadelphia, Pennsylvania. Certain legal matters will be passed upon for the City by the Office of the City Solicitor and Fineman & Bach, P.C. Certain legal matters will be passed on for PGW by Obermayer, Rebmann, Maxwell & Hippel, of Philadelphia, Pennsylvania.

OTHER MATTERS

Genece E. Brinkley, Esquire, Co-Counsel for the Underwriters is also under contract with the Gas Commission to act as a hearing examiner for customer disputes and certain other matters as directed by the Gas Commission. Deloitte & Touche, may also provide expert testimony on behalf of PGW in future rate proceeding.

INDEPENDENT AUDITS

The financial statements of PGW for the years ended August 31, 1990 and 1989 have been audited by Deloitte & Touche, independent certified public accountants, as set forth in their report in APPENDIX A. Such audited financial statements of PGW have been included in this Official Statement in reliance upon the report of Deloitte & Touche.

ENGINEERING REPORT

The Engineering Report prepared by Stone & Webster Management Consultants, Inc., APPENDIX B, has been included in reliance upon the expertise of that company as an independent consulting firm having broad experience in the design and analysis of the operation of gas works or gas distribution systems of the magnitude and scope of PGW and having skill in assessing assumptions used in the preparation of forecast financial statements of gas works systems.

NO LITIGATION CERTIFICATE

There is no controversy or litigation of any nature now pending or threatened restraining or enjoining the issuance, sale, execution or delivery of the Thirteenth Series Bonds, or in any way contesting or affecting the validity of the Thirteenth Series Bonds or any proceedings of the City taken with respect to the issuance or sale thereof, or the pledge or application of any moneys or security provided for the payment of the Thirteenth Series Bonds or the existence or powers of the City.

Upon delivery of the Thirteenth Series Bonds, the Office of the City Solicitor shall furnish a certificate, in form satisfactory to Bond Counsel, to the effect, among other things, that, except for litigation which in the opinion of the Office of the City Solicitor is without merit, and except as disclosed in the Official Statement, no litigation or other legal proceedings are pending, or, to the best of its knowledge, threatened to restrain or enjoin the issuance or delivery of the Thirteenth Series Bonds or the collection or pledge of any moneys provided for the payment of the Thirteenth Series Bonds or contesting or affecting the validity of the Thirteenth Series Bonds or contesting the powers of the City or its authority for the issuance of such Bonds.

NEGOTIABLE INSTRUMENTS

The Act provides that bonds issued thereunder shall have all the qualities and incidents of securities under the Uniform Commercial Code of the Commonwealth of Pennsylvania and shall be negotiable instruments.

CERTAIN REFERENCES

All summaries of the provisions of the Thirteenth Series Bonds and the security therefor, the Act, the General Ordinance and the Thirteenth Supplemental Ordinance set forth herein and in APPENDIX C hereof, and all summaries and references to other materials not purported to be quoted in full are only brief outlines of certain provisions thereof and do not constitute complete statements of such documents or provisions. Reference is made hereby to the complete documents relating to such matters for the complete terms and provisions thereof. So far as statements are made in this Official Statement involving matters of opinion, whether or not expressly so stated, they are made merely as such and not as representations of fact.

The Official Statement has been duly executed and delivered by the following officers on behalf of the City of Philadelphia.

CITY OF PHILADELPHIA

By:

Mayor

City Solicitor

City Controller

Approved:

Director of Finance

APPENDIX A
Audited Financial Statements of
Philadelphia Gas Works for the Years Ended
August 31, 1990 and 1989

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**Deloitte &
Touche**



PHILADELPHIA GAS WORKS

Financial Statements for the Years
Ended August 31, 1990 and 1989,
Required Pension Supplementary
Information and Independent
Auditors' Report

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INDEPENDENT AUDITORS' REPORT

To the Controller of the
City of Philadelphia and the
Chairman and Members of the
Philadelphia Gas Commission
Philadelphia, Pennsylvania

We have audited the accompanying balance sheets of the Philadelphia Gas Works (the "Company") as of August 31, 1990 and 1989 and the related statements of income, changes in City equity and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Philadelphia Gas Works as of August 31, 1990 and 1989, and the results of its operations and changes in its financial position for the years then ended in conformity with generally accepted accounting principles.

The supplementary information of pension funding progress on page 24 is not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and, accordingly, express no opinion on it.

Deloitte & Touche

Deloitte & Touche
November 2, 1990

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(thousands of dollars)				(thousands of dollars)			
ASSETS	Notes	1990	1989	EQUITY AND LIABILITIES	Notes	1990	1989
Utility plant, at original cost:	1			City equity	2	<u>\$201,951</u>	<u>\$201,381</u>
In service		\$864,865	\$816,951				
Under construction		<u>28,105</u>	<u>23,297</u>				
Total		892,970	840,248	Long-term debt:	8		
Less accumulated depreciation		<u>255,165</u>	<u>238,472</u>	Revenue bonds		567,473	513,933
Utility plant, net		<u>637,805</u>	<u>601,776</u>	Subordinate lease obligation		<u>23,437</u>	<u>24,170</u>
				Total long-term debt		<u>590,910</u>	<u>538,103</u>
Sinking fund, revenue bonds	3,8	<u>73,541</u>	<u>70,229</u>	Current liabilities:			
Capital improvement funds	3,8	<u>28,947</u>	<u>4,646</u>	Notes payable	6	21,000	82,000
Current assets:	3			Current portion of long-			
Cash		598	57	term debt:	8		
Temporary investments		<u>24,000</u>	<u>87,740</u>	Revenue bonds		26,640	21,414
Total Cash and Temporary				Subordinate lease obligation		363	361
Investments		<u>24,598</u>	<u>87,797</u>	Accounts payable		22,999	24,620
Accounts receivable:				Customer deposits		3,940	3,685
Customers		91,215	87,994	Other current liabilities and			
Others	2	14,698	4,132	deferred credits	1,7,12	32,462	18,366
Accrued gas revenues	1	6,300	6,450	Accrued accounts:			
Accumulated provision for ,				Interest, taxes and wages		10,898	13,836
uncollectible accounts		<u>(41,053)</u>	<u>(39,181)</u>	Distribution to the City	2	<u>3,000</u>	<u>3,000</u>
Accounts receivable, net		71,160	59,395				
Materials and supplies	1	41,080	42,346	Total current liabilities		<u>121,302</u>	<u>167,282</u>
Other current assets and				Employees' deferred compensation plan	5	<u>5,420</u>	<u>3,942</u>
deferred debits	12	<u>8,276</u>	<u>7,534</u>	Other liabilities and			
Total current assets		<u>145,114</u>	<u>197,072</u>	deferred credits	12	<u>6,914</u>	<u>11,216</u>
Unamortized bond issuance costs	1	<u>6,296</u>	<u>5,687</u>	Commitments and contingencies	12	-	-
Unamortized losses on reacquired debt	1,8	<u>22,324</u>	<u>20,538</u>	Total equity and liabilities		<u>\$926,497</u>	<u>\$921,924</u>
Employees' deferred compensation plan	5	<u>5,420</u>	<u>3,942</u>				
Other assets and deferred debits	4,12	<u>7,050</u>	<u>18,034</u>				
Total assets		<u>\$926,497</u>	<u>\$921,924</u>				

See accompanying notes to financial statements.

PHILADELPHIA GAS WORKS

STATEMENTS OF INCOME
for the years ended August 31, 1990 and 1989

		(thousands of dollars)	
	Notes	1990	1989
Operating revenues:			
Non-heating	1,6,7,8	\$ 90,245	\$ 87,607
Heating		376,006	379,673
Unbilled gas adjustment		<u>(150)</u>	<u>(300)</u>
Total gas revenues		466,101	466,980
Other operating revenues		<u>6,071</u>	<u>5,726</u>
Total operating revenues		<u>472,172</u>	<u>472,706</u>
Operating expenses:			
Natural gas	1,12	230,362	238,087
Other raw material		1,037	(155)
Gas processing		24,353	24,565
Customer service		19,229	20,382
Distribution		20,588	16,244
Collection		7,051	7,132
Meter reading		6,053	5,954
Appropriation for uncollectible reserve		24,137	19,297
Customer relations		8,448	8,306
Customer accounting		2,816	2,984
Marketing		2,639	2,979
Administrative and general		26,989	27,185
Pensions	1,10	17,748	21,497
Taxes		<u>6,153</u>	<u>5,831</u>
Total operating expenses except depreciation		<u>397,603</u>	<u>400,288</u>
Depreciation	1	22,155	21,887
Less depreciation distributed through clearing accounts	1	<u>3,283</u>	<u>2,872</u>
Total		<u>18,872</u>	<u>19,015</u>
Total operating expenses		<u>416,475</u>	<u>419,303</u>
Operating income		55,697	53,403
Interest and other income	1	<u>11,880</u>	<u>12,858</u>
Income before interest		<u>67,577</u>	<u>66,261</u>
Interest:			
Long-term debt		41,527	40,815
Other		8,536	8,104
Allowance for funds used during construction	1	<u>(1,056)</u>	<u>(1,183)</u>
Total interest		<u>49,007</u>	<u>47,736</u>
Net income		18,570	18,525
Distribution to City of Philadelphia	2	<u>18,000</u>	<u>18,000</u>
Transferred to City equity		<u>\$====570</u>	<u>\$====525</u>

See accompanying notes to financial statements.

PHILADELPHIA GAS WORKS

STATEMENT OF CHANGES IN CITY EQUITY
for the years ended August 31, 1990 and 1989

	(thousands of dollars)	
	<u>1990</u>	<u>1989</u>
Balance, beginning	\$201,381	\$200,856
Transferred from statement of income	<u>570</u>	<u>525</u>
Balance, ending	<u>\$201,951</u>	<u>\$201,381</u>

See accompanying notes to financial statements.

PHILADELPHIA GAS WORKS

STATEMENTS OF CHANGES IN FINANCIAL POSITION
for the years ended August 31, 1990 and 1989

	(thousands of dollars)	
	<u>1990</u>	<u>1989</u>
Sources of working capital:		
Operations:		
Net income	\$ 18,570	\$ 18,525
Items not requiring (providing)		
working capital:		
Depreciation and amortization	27,622	27,814
Appropriation to reserve for injuries		
and damages	875	545
Allowance for funds used during		
construction	<u>(1,499)</u>	<u>(1,380)</u>
Working capital provided by operations	45,568	45,504
Proceeds from sale of equipment	123	175
Proceeds from issuance of long-term debt	127,110	157,520
Cost of long-term debt issuances and		
losses on reacquired debt	(6,170)	(16,033)
Capital improvement fund (increases) decreases	(24,301)	27,584
Contributions in aid of construction	<u>1,299</u>	<u>2,233</u>
Total sources of working capital	<u>143,629</u>	<u>216,983</u>
Applications of working capital:		
Construction expenditures	56,349	55,826
Cost of removal of plant in service	1,758	2,242
Reduction of long-term debt	74,303	136,692
Payment of injuries and damages claims	941	1,534
Distribution to City of Philadelphia	18,000	18,000
Sinking fund deposits (net)	3,312	3,081
Payment of waste removal costs	-	1,915
Capital/reimbursable expenditures (net)	<u>(5,056)</u>	<u>(301)</u>
Total applications of working capital	<u>149,607</u>	<u>218,989</u>
(Decrease) in working capital	<u>== (5,978) ==</u>	<u>== (2,006) ==</u>
Summary of net changes in working capital:		
Increase (decrease) in current assets:		
Cash and temporary investments	(63,199)	47,742
Accounts receivable, net	11,765	7,833
Materials and supplies	(1,266)	(5,073)
Other current assets and deferred debits	<u>742</u>	<u>3,756</u>
Increase (decrease) in current assets	<u>(51,958)</u>	<u>54,258</u>
Increase (decrease) in current liabilities:		
Notes payable	(61,000)	47,625
Current portion of long-term debt	5,228	1,897
Accounts payable	(1,621)	286
Customer deposits	255	354
Other current liabilities and deferred		
credits	14,096	6,784
Accrued interest, taxes and wages	<u>(2,938)</u>	<u>(682)</u>
Increase (decrease) in current liabilities	<u>(45,980)</u>	<u>56,264</u>
(Decrease) in working capital	<u>\$(5,978)</u>	<u>\$(2,006)</u>

See accompanying notes to financial statements.

PHILADELPHIA GAS WORKS

NOTES TO FINANCIAL STATEMENTS

For the Years Ended August 31, 1990 and 1989

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

The accounting methods employed by the Philadelphia Gas Works (the "Company") are prescribed by the City of Philadelphia (the "City") and, in all material respects, are in accordance with generally accepted accounting principles. The principal accounting policies within this framework are described as follows:

Regulation

The Company is subject to the rules and regulations of the Philadelphia Gas Commission (the "PGC") and generally maintains its accounts in accordance with the prescribed Uniform System of Accounts.

On June 3, 1988 the Company filed with the PGC its fiscal year 1989 operating budget and a request to increase annual base revenues \$49,000,000. On October 13, 1988, the PGC rejected the Company's June 3, 1988 request for a \$49,000,000 base rate increase and established rates reflecting a \$2,000,000 decrease in base rates.

On June 29, 1990 the Company filed with the PGC its fiscal year 1991 Operating Budget and a request to increase annual base revenues \$31,000,000. Hearings before the PGC are scheduled for this matter in November, 1990.

Utility Plant

Utility plant is stated at original cost. Utility plant in service includes a Synthetic Natural Gas Plant (SNG) that is being maintained primarily in a reserve status. At August 31, 1990 and 1989, the net book value of the SNG plant was \$47,268,000 and \$50,113,000, respectively.

Allowance for Funds Used During Construction

Allowance for funds used during construction (AFUDC) is an estimate of the cost of funds used for construction purposes. The AFUDC as calculated on borrowed funds reduces interest expense and that derived from internally generated funds is reported as other income. The AFUDC rate applied to construction work in progress was 7.20% in 1990 and 7.65% in 1989.

Property Additions, Retirements, Sales, and Maintenance

The cost of additions, replacements and betterments are capitalized and included in the utility plant accounts. The cost of property sold or retired is eliminated from the utility plant accounts and charged to accumulated depreciation. Gains and losses on sales of utility plant are included in other income. Normal repairs, maintenance, and the cost of minor property items are charged to operating expenses as incurred.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued):

Depreciation

Depreciation is provided on a straight-line method using rates applied to each asset category. A depreciation study undertaken in 1987 established rates depreciating utility plant over its revised remaining useful life and included a net salvage component.

As part of its rate decision of October 13, 1988, the PGC disallowed the accrual of the net salvage component in depreciation. Consequently, beginning with the year ended August 31, 1989, depreciation rates were modified to remove this component and the cost of removal net of salvage is now being recognized as an expense as incurred. The effect of this change was a decrease in depreciation expense of approximately \$3.9 million for the year ended August 31, 1989.

Accrued Gas Revenues

Estimated revenues from gas distributed and unbilled are accrued and included in income.

Customers

The Company's service territory encompasses the City of Philadelphia. Of the Company's approximately 520,000 customers, over 95 percent are residential.

Gas Cost Rate (GCR)

The GCR is designed to provide a mechanism to recover, on an annualized and level basis, the estimated difference between actual purchased gas and raw material cost and the amount of cost included in base rates. This difference results in an underbilling or overbilling of costs at the end of a fiscal period. Overbillings are liabilities at the end of the fiscal year in which they occur while underbillings are deferred debits until billed. The GCR is adjusted in the subsequent fiscal year to reflect the underbillings or overbillings. Changes in the GCR offset the amounts of gas revenues and natural gas operating expenses but do not affect operating income or net income. (Also, see Note 7).

In August 1988, the PGC authorized changing the GCR from a negative \$.4419/Mcf to a negative \$.0655/Mcf. This rate was approved on August 15, 1988 with an effective date of September 1, 1988. On October 3, 1989 the PGC authorized continuance of the GCR at a negative \$.0655/Mcf for the fiscal year ended August 31, 1990.

On August 1, 1990, the Company filed its annual request to reset the GCR with the PGC requesting a negative \$.1828/Mcf for the fiscal year commencing September 1, 1990. On August 29, 1990 the PGC authorized the Company to continue using its current GCR, a negative \$.0655/Mcf, into fiscal year 1991 pending the PGC's consideration of the Company's proposed 1991 fiscal year GCR.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued):

Materials and Supplies

Materials and supplies, consisting primarily of fuel stock, gases stored to meet peak demand requirements and spare parts, are stated at the lower of average cost or market.

Bond Issuance Costs and Debt Discount

Discount and expenses arising from the issuance of revenue bonds are amortized using the interest method over the term of the particular bond issue.

Losses on Reacquired Debt

Losses on reacquired debt are deferred and amortized to interest expense over the life of the refunding bond issue as permitted by the PGC.

Pensions

The Company has a noncontributory pension plan (the "Pension Plan") covering substantially all employees and providing for retirement payments at age sixty-five or earlier under various options. In accordance with Resolutions of the PGC, Ordinances of City Council, and as prescribed by the City's Director of Finance, the Pension Plan is being funded with contributions by the Company to the Sinking Fund Commission of the City.

In December 1988, the Company, on the basis of an ordinance approved by City Council, offered an Early Retirement Incentive Program to employees aged 55 or older with a minimum 15 years of credited service. The incentives offered to induce participation included no actuarial early retirement penalties and a 2-year increase in credited service. The increased pension benefit offered was available as either an increase in the monthly benefit or a lump-sum distribution of the present value of the actuarially determined benefit increase. (Also, see Note 10).

Reserve for Injuries and Damages

The Company is principally insured through insurance carriers; however, the Company is required to cover settlement of claims which are excluded under the provisions of such insurance policies. A reserve has been established, in accordance with PGC regulations, in an amount which estimates settlements to be paid by the Company in the next fiscal year. Estimated losses from claims for occurrences not covered by insurance which will not be paid in the next fiscal year have not been provided for. Such expenses will be recovered through future rates. Charges against the reserve are made as claims are settled. (Also, see Note 11).

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued):

Presentation

Certain 1989 amounts have been reclassified to conform with the 1990 presentation.

2. OWNERSHIP AND MANAGEMENT:

The Company is owned by the City. As of January 1, 1973, under terms of a two-year agreement automatically extended for successive two-year periods unless cancelled upon 90 days notice by the City, the Company is being managed by the Philadelphia Facilities Management Corporation (PFMC). The agreement, as amended, provides for reimbursement to PFMC of actual costs incurred in managing the Company, not to exceed \$300,000 annually. The agreement requires the Company to make annual payments of \$18,000,000 to the City.

The Company engages in various other transactions with the City. The Company provides gas service to the City. Operating revenues include \$7,284,000 in 1990 and \$6,114,000 in 1989 relating to sales to the City. Water and sewer services and licenses are purchased from the City. Such purchases totaled \$280,000 in 1990 and \$374,000 in 1989.

The Company has established an account receivable of \$2,000,000 based on its request for excess interest earnings on deposit in the revenue bond sinking fund reserve account. Investments therein are reported within the Company's accounts but are managed by the City.

Certain activities of the PGC are paid for by the Company. Such payments totaled \$745,000 in 1990 and \$961,000 in 1989.

Company employees are subject to payroll wage taxes imposed by the City. Such wage taxes paid to the City totaled \$4,474,000 in 1990 and \$4,341,000 in 1989.

3. CASH AND INVESTMENTS:

A. Cash

Bank balances at August 31, 1990 and 1989 were \$4,758,000 and \$4,502,000, respectively. Book cash balances at August 31, 1990 and 1989 were \$598,000 and \$57,000, respectively. All of the deposited funds are in depositories insured by a federal agency in addition to being collateralized in accordance with City and State statutes. Federal depository insurance on these balances at August 31, 1990 and 1989 was \$424,000 and \$527,000, respectively. The composition of the Company's deposits throughout the year ended August 31, 1990 was not significantly different from that at the balance sheet date.

3. CASH AND INVESTMENTS (Continued):

B. Investments

Statutes authorize the Company to invest in obligations of the U.S. Treasury, U.S. Agencies and Instrumentalities, and repurchase agreements. For the year ended August 31, 1990, the Company operated in all material respects within the provisions of such Statutes.

The Company's investments are categorized below to give an indication of the level of credit risk assumed at year-end. Category 1 includes investments that are insured or registered or for which the securities are held by the Company or its agent in the Company's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the Company's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent, but not in the Company's name. There were no Category 2 investments at August 31, 1990 and 1989. Category 3 investments were repurchase agreements entered into on August 30 and 31 of each year which matured within the following 10 days.

REPURCHASE AGREEMENTS

	<u>Category</u>			<u>Carrying Amount</u>	<u>Market Value</u>
	<u>1</u>	<u>2</u>	<u>3</u>		
August 31, 1990	\$20,000,000	\$ -	\$ 4,000,000	\$24,000,000	\$24,000,000
August 31, 1989	\$69,440,000	\$ -	\$18,300,000	\$87,740,000	\$87,740,000

The Company's Sinking Fund deposits for the years ended August 31, 1990 and 1989, and \$21,150,000 of the year end August 31, 1990 Capital Improvement Fund deposits are maintained by the City and are considered Category 1 investments. For the years ended August 31, 1990 and 1989, \$7,797,000 and \$4,646,000, respectively of the Capital Improvement Fund deposits were maintained in the Trust Department of a bank and not in the Company's name and are classified as Category 3 investments. The amount of the Company's investments in the various categories of credit risk during the year ended August 31, 1990 was not significantly different from the categorization at the balance sheet date.

4. DEFERRED WASTE REMOVAL COSTS:

In compliance with a rate order issued by the PGC in March, 1987, the Company deferred recognition of the expense involved in removing residual waste material from its gas production plants. Such costs are being amortized to expense over a three year period. The unamortized remaining amount included in other assets and deferred debits as of August 31, 1990 and 1989 was \$638,000 and \$2,331,000, respectively.

5. EMPLOYEES' DEFERRED COMPENSATION PLAN:

The Company has an employees' deferred compensation plan (the "Plan") created in accordance with Internal Revenue Code Section 457. The Plan, available to all employees, permits the participants to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency.

All amounts of compensation deferred under the Plan, all property and rights purchased with those amounts, and all income attributable to those amounts, property, or rights are (until paid or made available to the employee or other beneficiary) solely the property and rights of the Company (without being restricted to the provisions of benefits under the Plan), subject only to the claims of the Company's general creditors. Participants' rights under the Plan are equal to those of general creditors of the Company in an amount equal to the fair market value of the deferred account for each participant. The Company believes that it is unlikely that it will use the assets to satisfy the claims of general creditors in the future.

The Plan provides that in the absence of gross negligence, fraud or willful misconduct, neither the Company nor the Plan Administrator shall be accountable or liable for any investment loss.

At August 31, 1990 and 1989 the market value of the Plan's assets was \$5,420,000 and \$3,942,000, respectively.

6. NOTES PAYABLE:

Pursuant to the provisions of certain Ordinances and Resolutions of the City, the Company may sell short-term notes in a principal amount which, together with interest, may not exceed \$85,000,000 outstanding at any one time. These notes are intended to provide additional working capital. They are supported by an irrevocable letter of credit and a subordinated security interest in the Company's revenues.

The notes outstanding at August 31, 1990 and 1989 have an average weighted interest rate of approximately 5.8% and 6.4%, respectively, and an average term to maturity of 31 days and 174 days, respectively. Principal amounts outstanding at August 31, 1990 and 1989 were \$21,000,000 and \$82,000,000, respectively.

7. OTHER CURRENT LIABILITIES AND DEFERRED CREDITS:

During the years ended August 31, 1990 and 1989, the Company's billed gas costs under the GCR Tariff exceeded its actual gas costs by \$7,677,000 and \$3,817,000, respectively. Accordingly, the Company deferred this excess which is included in other current liabilities and deferred credits. The GCR Tariff mechanism amortizes the liability through a reduction in rates during the subsequent fiscal year.

8. LONG-TERM DEBT:

Revenue Bonds

The following summary of revenue bond debt consists primarily of term and serial bonds issued by the City under agreements whereby the Company must reimburse the City for the principal and interest payments required by the bond ordinances:

	<u>August 31, 1990</u>			<u>August 31, 1989</u>		
	<u>Current Portion</u>	<u>Long-Term Portion</u>	<u>Total</u>	<u>Current Portion</u>	<u>Long-Term Portion</u>	<u>Total</u>
	<u>(Thousands of Dollars)</u>					
Revenue Bonds.....	\$ 28,035	\$584,270	\$612,305	\$ 22,430	\$525,045	\$547,475
Unamortized Debt Discount.	<u>(1,395)</u>	<u>(16,797)</u>	<u>(18,192)</u>	<u>(1,016)</u>	<u>(11,112)</u>	<u>(12,128)</u>
Total	<u>\$ 26,640</u>	<u>\$567,473</u>	<u>\$594,113</u>	<u>\$ 21,414</u>	<u>\$513,933</u>	<u>\$535,347</u>

Principal maturities and scheduled interest payments related to outstanding revenue bond issues during the next five fiscal years are as follows:

<u>Year Ending August 31</u>	<u>Principal</u> <u>(Thousands of Dollars)</u>	<u>Interest</u>
1991	\$ 28,035	\$ 39,794
1992	29,830	38,643
1993	31,740	36,697
1994	33,850	34,577
1995	36,145	32,257

8. LONG-TERM DEBT (Continued):

Revenue Bonds (Continued)

Under the authority of the General Gas Works Revenue Bond Ordinance of 1975, the City has issued twelve series of Gas Works Revenue Bonds consisting of serial and term bonds. Proceeds of all series of Revenue Bonds were applied to reduce capital improvement loans from the City which had been previously approved by the voters, but for which bonds had not been issued, to fund future capital improvements, or to refund bonds previously issued. The serial bonds are not subject to redemption prior to maturity while the term bonds are subject to redemption at the option of the City after a designated date, either in whole or in part at varying redemption prices. In addition, the term bonds are subject to mandatory redemption after a designated date prior to maturity at a redemption price of 100% of principal amount and accrued interest. Funds deposited in a sinking fund may be used for this purpose.

Under the terms of the General Ordinance, the City is required to maintain rates to allow the Company to satisfy a debt coverage ratio.

Also provided by the General Ordinance is the establishment of a Sinking Fund into which deposits are made sufficient to meet all principal and interest requirements of the bonds as they become due. The General Ordinance also provides that sinking fund reserves be maintained as part of the Sinking Fund, which reserves have heretofore initially been funded from the proceeds of each series of bonds in an amount equal to the maximum annual debt service requirement on the Bonds of each such series in any fiscal year. Monies in the Sinking Fund Reserve are to be applied to the payment of debt service if for any reason other monies in the Sinking Fund should be insufficient.

Capital Improvement funds are revenue bond proceeds to be utilized for construction expenditures.

The revenue bonds are, and will be, equally and ratably collateralized by a security interest in all of the Company's project revenues and monies in the Sinking Fund and Sinking Fund Reserve.

8. LONG-TERM DEBT (Continued):

The following is a summary of the principal amount of outstanding revenue bonds:

Series	Year of Issue	Original Amount	August 31, 1990		August 31, 1989		Interest Rates	Year of Final Maturity	
			Current Portion	Long-Term Portion	Current Portion	Long-Term Portion			
(Thousands of Dollars)									
3rd:	Term.....	1976	\$ 33,865	\$ 2,980	\$ 23,115	\$ 2,775	\$ 26,095	7.375%	1997
4th:	Term.....	1978	46,855	3,900	35,880	3,655	39,780	6.8-6.875%	1998
5th:	Term.....	1979	33,320	2,615	28,250	2,455	30,865	6.5-6.8%	1999
6th:	Serial...	1980	24,510	-	-	3,895	-	8.0-8.25%	1990
7th:	Term.....	1982	10,675	-	10,675	-	10,675	6.00%	2013
8th:	Serial...	1985	19,455	1,155	15,240	1,085	16,395	6.00-8.60%	2000
	Term.....	1985	70,830	-	5,145	-	45,830	8.70-8.75%	2015
			<u>90,285</u>	<u>1,155</u>	<u>20,385</u>	<u>1,085</u>	<u>62,225</u>		
9th:	Serial...	1985	37,750	1,635	7,910	1,530	9,545	6.10-9.10%	2001
	Term.....	1985	70,780	-	-	-	-	9.00-9.125%	2012
			<u>108,530</u>	<u>1,635</u>	<u>7,910</u>	<u>1,530</u>	<u>9,545</u>		
10th:	Serial...	1986	88,090	5,605	80,120	1,320	85,725	5.25-7.20%	2001
11th:	Serial...	1987	62,520	6,025	41,670	5,715	47,695	5.00-7.40%	2000
	Term.....	1987	79,920	-	79,920	-	79,920	7.70-7.875%	2017
			<u>142,440</u>	<u>6,025</u>	<u>121,590</u>	<u>5,715</u>	<u>127,615</u>		
11th "C":	Serial...	1989	46,183	2,345	43,838	-	46,183	6.10-7.15%	2004
	Term.....	1989	86,337	-	86,337	-	86,337	6.75-7.25%	2015
			<u>132,520</u>	<u>2,345</u>	<u>130,175</u>	<u>-</u>	<u>132,520</u>		
	Accreted Interest			<u>2,277</u>		<u>-</u>			
				<u>132,452</u>		<u>132,520</u>			
12th "A":	Serial...	1990	20,911	940	19,971			5.90-7.10%	2006
	Term.....	1990	29,510	-	29,510			6.00%	2012
			<u>50,421</u>	<u>940</u>	<u>49,481</u>				
	Accreted Interest			<u>247</u>					
				<u>49,728</u>					
12th "B":	Serial...	1990	12,670	835	11,835			5.90-7.00%	2001
	Term.....	1990	62,330	-	62,330			7.00-7.10%	2020
			<u>75,000</u>	<u>835</u>	<u>74,165</u>				
TOTAL			<u>\$ 28,035</u>	<u>\$584,270</u>	<u>\$ 22,430</u>	<u>\$525,045</u>			

8. LONG-TERM DEBT (Continued):

A portion of certain revenue bonds were issued as zero coupon securities. Interest on these securities is accrued and compounded on the payment dates of the current interest bonds within the issue. The accrued interest to the date of compounding is reflected in the preceding schedule as accreted interest and is reported as long-term debt.

On February 14, 1989 the Company issued Series C of the Eleventh Series Revenue Bonds in the amount of \$132,520,000, for the purpose of providing funds, at more favorable interest rates, for the partial advanced refunding of \$25,000,000 and \$88,795,000 respectively of the Eighth and Ninth Series Revenue Bond issues. As a result, \$64,325,000 of the Eighth Series issued May 15, 1985 and maturing through 2012, remained outstanding following the refunding and \$12,505,000 of the Ninth Series issued August 1, 1985 and maturing through 1995, remained outstanding following the refunding. The difference between the reacquisition price and the net carrying amount of the reacquired debt resulted in a loss of \$13,863,000 which is being amortized over the life of the Eleventh Series C Revenue Bonds. This advanced refunding reduced the Company's future debt service costs by \$11,104,000 and, resulted in a net economic gain of \$7,617,000.

In March, 1990 the Company issued Series A of the Twelfth Series Revenue Bonds in the amount of \$50,421,000 for the purpose of providing funds, at more favorable interest rates, for the partial advanced refunding of \$40,685,000 of the Eighth Series Revenue Bond issue. As a result of this refunding, and the Eleventh Series C Revenue Bond refunding of Eighth Series debt (referenced above), \$22,625,000 of the Eighth Series issued May 15, 1985 and maturing through 2002 remained outstanding following the refunding. The difference between the reacquisition price and the net carrying amount of the reacquired debt resulted in a net loss of \$3,846,000 which is being amortized over the life of the Twelfth Series A Revenue Bonds. This advanced refunding reduced the Company's future debt service costs by \$2,279,000 and resulted in a net economic gain of \$2,051,000.

On June 29, 1990 the Company issued Series B of the Twelfth Series Revenue Bonds in the amount of \$75,000,000. These bonds, maturing through 2020, were issued for the purpose of providing funding for capital improvements with the proceeds being deposited in the capital improvement fund. At August 31, 1990, \$28,650,000 remained on deposit in the capital improvement fund to provide funding for future capital improvements.

8. LONG-TERM DEBT (Continued):

Subordinate Lease Obligation

On August 1, 1989 the Company refinanced the net book value, which approximated the fair market value, of its Headquarters and office complex at 800 W. Montgomery Avenue. This was accomplished through the sale of the facility to the Philadelphia Municipal Authority (PMA) and its leaseback to the Company under a lease which expires June 1, 2014. As part of the indenture, the Company has guaranteed lease payments in an amount equal to the scheduled debt service on the bonds issued by PMA to finance the facility purchase. This lease obligation is subordinate to the Gas Works Revenue Bonds, other general obligation debt and Gas Works Notes. Proceeds from the refinancing of the building were utilized in the Company's capital program. The total amount financed was \$25,000,000.

The following is a summary of the subordinate lease obligation:

	<u>August 31, 1990</u>		<u>August 31, 1989</u>	
	<u>Current</u>	<u>Long-Term</u>	<u>Current</u>	<u>Long-Term</u>
	<u>Portion</u>	<u>Portion</u>	<u>Portion</u>	<u>Portion</u>
	<u>(Thousands of Dollars)</u>			
Subordinate Lease Obligation	\$ 415	\$24,195	\$ 390	\$24,610
Unamortized Debt Discount	<u>(52)</u>	<u>(758)</u>	<u>(29)</u>	<u>(440)</u>
Total	<u>\$ 363</u>	<u>\$23,437</u>	<u>\$ 361</u>	<u>\$24,170</u>

Future minimum rentals, including interest, on the lease are as follows:

	<u>Thousands of Dollars</u>
1991	\$ 2,245
1992	2,243
1993	2,244
1994	2,242
1995	2,243
Thereafter	<u>42,655</u>
Total	<u>\$53,872</u>

9. DEFEASED DEBT:

Defeased debt of the Company (bonds issued by the Company now payable as to principal and interest thereon from the proceeds of irrevocably pledged assets) at August 31, 1990 and 1989 was as follows:

	Revenue Bond Issue and Scheduled Final Maturity	Interest rate	Thousands of Dollars Amount	
			1990	1989
6th	May 15, 2001	9.125 - 9.625%	\$ -	\$75,490
7th	March 15, 2013	8.75 - 10.875%	88,310	89,380
8th	May 15, 2015	8.70 - 8.75%	65,685	25,000
9th	March 15, 2012	8.70 - 9.125%	88,795	88,795

The assets pledged are primarily noncallable-U.S. Government securities and the interest to be earned thereon. The investments had a carrying value of \$255,152,363 at August 31, 1990 bearing interest on face value at 0% to 10.27%. The investments had a carrying value of \$298,705,820 at August 31, 1989 bearing interest on face value at 0% to 11.375%. The investments are held by the Trustee and maturities and interest payments are scheduled to coincide with trustee cash requirements for debt service.

The defeased Sixth series bonds were retired on May 15, 1990. The defeased bonds described above and the investments pledged for their redemption are not recognized on the Company's balance sheets in accordance with the terms of the Indenture of Defeasance.

10. ACCOUNTING FOR PENSION COSTS:

A. Plan Description

The Company sponsors a public employee retirement system (PERS), a single employer defined benefit plan to provide pension benefits for all its employees.

At September 1, 1988, the date of the last actuarial valuation, adjusted for the impact of the Early Retirement Incentive Program (see Note 1), the Pension Plan membership consisted of:

Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them:	<u>1,930</u>
Current employees:	
Vested	1,149
Non-vested	<u>1,288</u>
Total Current	<u>2,437</u>
Total Membership	<u><u>4,367</u></u>

10. ACCOUNTING FOR PENSION COSTS (Continued):

A. Plan Description (Continued)

The Pension Plan provides retirement benefits as well as death and disability benefits. Retirement benefits vest after 10 years of credited service. Employees who retire at or after age 65 are entitled to receive an annual retirement benefit, payable monthly, in an amount equal to the greater of:

- (i) 1.25% of the first \$6,600 of Final Average Earnings plus 1.75% of the excess of Final Average Earnings over \$6,600, times Credited Service, with a maximum of 60% of the highest annual earnings during the last 10 years of Credited Service, applicable to all participants.
- (ii) 2% of total earnings received during the period of Credited Service plus 22.5% of the first \$100 of such amount, applicable only to participants who were employees on or prior to March 24, 1967.

Final-average earnings are the employee's average pay, over the highest 5 of the last 10 years of credited service. Employees with 15 years of credited service may retire at or after age 55 and receive a reduced retirement benefit.

Covered employees are not required to contribute to the Pension Plan. The Company is required by statute to contribute the amounts necessary to finance the Pension Plan. Benefit and contribution provisions are established by City ordinance and may be amended only as allowed by City ordinance.

B. Summary of Significant Accounting Policies and Plan Asset Matters

Basis of Accounting

Pension Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized as revenues in the period in which employee services are performed.

Method Used to Value Investments

Pension Plan investments are reported at cost. Investment income is recognized as earned. Gains and losses on sales and exchanges are recognized on the transaction date.

10. ACCOUNTING FOR PENSION COSTS (Continued):

C. Funding Status and Progress

The amount shown below as "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess the Pension Plan's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among PERS.

Significant actuarial assumptions used include: (a) a rate of return on the investment of present and future assets of 7 percent per year compounded annually, (b) projected salary increases of 5 percent per year compounded annually, and (c) 62 as the assumed retirement age.

At September 1, 1989, the Company updated the September 1, 1988 actuarial valuation. The significant actuarial assumptions used remained the same. At September 1, 1989, the unfunded pension benefit obligation was \$101,352,000, as follows:

Pension benefit obligation:

Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$196,532,000
Current employees:	
Accumulated employee contributions including allocated investment income	None
Vested	50,780,000
Non-vested	<u>61,954,000</u>
Total pension benefit obligation	\$309,266,000
Net assets available for benefits, at cost (Market Value \$225,406,000)	<u>207,914,000</u>
Unfunded pension benefit obligation	<u><u>\$101,352,000</u></u>

10. ACCOUNTING FOR PENSION COSTS (Continued):

D. Contributions Required and Contributions Made

The Pension Plan funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate sufficient assets to pay benefits when due. Level percentages of payroll employer contribution rates are determined using the Projected Unit Credit actuarial funding method. Amortization of the unfunded pension benefit obligation over a 40 year period commenced in 1967.

Contributions totaling \$17,748,000 or 19.1% of the covered payroll were made in 1990. These contributions consisted of: (a) \$7,115,000 normal cost and (b) \$10,633,000 amortization of the unfunded pension benefit obligation. Fiscal 1990 contributions represented contributions in accordance with the actuarial recommended contribution through the actuarial study performed in September, 1988.

Historically, payments to beneficiaries are made by the Company and not from the assets of the Pension Plan. In 1990, payments to beneficiaries exceeded the Company's actuarially computed pension contribution and a withdrawal of \$1,650,000 from the pension assets was necessary to meet beneficiary payment obligations.

Significant actuarial assumptions used to compute contribution requirements are the same as those used to compute the standardized measure of the pension obligation discussed above.

E. Post Retirement Benefit Information

In addition to providing pension benefits, the Company also provides health care and life insurance benefits to Pension Plan beneficiaries and their dependents. The Company recognizes the cost of providing health care benefits for the 1,805 and 1,930 beneficiaries and their dependents for the 1990 and 1989 fiscal years, respectively, and the cost of providing such benefits for approximately 2,450 active employees and their dependents by charging the annual insurance premiums to expense. Total premiums incurred for health care amounted to \$15,438,000 in 1990 and \$12,863,000 in 1989 of which approximately 32% represents payments on behalf of retired employees and their dependents. Total premiums for group life insurance were \$596,000 in 1990 and \$1,434,000 in 1989 of which approximately 24% is attributable to retired employees.

10. ACCOUNTING FOR PENSION COSTS (Continued):

F. Trend Information

Trend information gives an indication of the progress made in accumulating sufficient assets to pay benefits when due. Certain historical trend information for the Company's PERS is presented below for the last three years.

	<u>For the Years Ended</u>		
	<u>August 31,</u>		
	<u>1989</u>	<u>1988</u>	<u>1987</u>
Net assets available for benefits (at cost) as a percentage of the pension benefit obligation	67.2%	66.1%	68.0%
Unfunded pension benefit obligation as a percentage of the annual covered payroll	108.8%	103.0%	97.7%
Company contributions to the PERS as a percentage of the annual covered payroll:	19.1%	17.6%	18.6%

Contributions were made in accordance with actuarially determined contribution requirements.

G. Ten-Year Historical Trend Information (unaudited)

Additional historical trend information designed to provide information about the progress made by the Company in accumulating sufficient assets to pay pension benefits as they become due is presented on page 24 ("Analysis of Pension Funding Progress").

11. RISK MANAGEMENT:

The Company is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Company is principally insured through insurance carriers. The Company's property is insured against the risk of loss or damage, without aggregate limits, in the amount of \$250 million per occurrence with a \$100,000 deductible; subject, however, to an annual aggregate limit of \$100 million for earthquake and an annual aggregate limit of \$50 million for flood, generally, and to lower flood limits as to the Richmond Plant. In addition, the Company maintains boiler and machinery, blanket crime, and other forms of property insurance. With respect to incidents arising on or after October 1, 1986, the Company has maintained policies of liability insurance insuring against the risk of damage or injury to the public for \$25 million in excess of \$500,000 for any one incident, generally without aggregate

11. RISK MANAGEMENT (Continued):

limits and for incidents exceeding the foregoing coverage, there is aggregate coverage of \$175 million. The Company also maintains \$25 million of workers' compensation insurance in excess of \$500,000 per incident for on-duty injuries to employees. During the last three fiscal years, no claim settlements have exceeded the level of insurance coverage. None of these losses have been settled with the purchase of annuity contracts. Director's and officer's liability insurance coverage was cancelled in January, 1989 as the management agreement between the City and PFMC transfers this risk and responsibility to the City.

A reserve is maintained, in accordance with PGC regulations, in an amount which estimates settlements to be paid by the Company in the next fiscal year. Estimated losses from claims for occurrences not covered by insurance which will not be paid in the next fiscal year have not been provided for. Such expenses will be recovered through future rates. Charges against the reserve are made as claims are settled.

Claims and settlement activity is as follows:

Year Ended August 31,	Thousands of Dollars				
	Beginning of Year Claims	Current Year Claims and Estimate Adjustments	Claims Settled	End of Year Claims	Reserve Amount
1989	\$ 5,156	\$ 3,371	\$ (2,808)	\$ 5,719	\$ 4,576
1990	5,719	3,457	(2,740)	6,436	3,416

Also, the Company has entered into several one year contracts to provide health care for both active and retired employees which contracts are experience rated and premiums adjusted annually; and has acquired approximately \$150 million of group life insurance coverage for both the active and retired employees, which is retrospectively rated on a monthly basis. (See also note 10E).

12. COMMITMENTS AND CONTINGENCIES:

Commitments for major construction and maintenance contracts were approximately \$2,828,000 and \$3,405,000 as of August 31, 1990 and 1989, respectively.

The Company is committed under various noncancellable operating lease agreements to pay minimum annual rentals as follows:

<u>Year Ended</u> <u>August 31,</u>	<u>Thousands of Dollars</u>
1991	\$ 686
1992	283
1993	70
1994	<u>35</u>
Total	<u>\$1,074</u>

Rent expense for the years ended August 31, 1990 and 1989 amounted to \$1,470,000 and \$1,964,000, respectively.

In the 1988 fiscal year, the Company began paying as part of its normal monthly bills pipeline take-or-pay costs billed by its interstate pipeline suppliers under Federal Energy Regulatory Control (FERC) approved tariffs. Through August 31, 1990, the amount of these costs paid by the Company was approximately \$14,645,000 which includes approximately \$6,399,000 and \$6,412,000 for the years ended August 31, 1990 and 1989. At August 31, 1990 the Company estimates a total remaining liability of approximately \$23 million under the multi-year cost recovery period established by FERC. Approximately \$6.5 million of the liability relates to charges which the Company must pay regardless of future purchases and has been recorded as both a deferred debit and a deferred credit on the Balance Sheet. The remaining \$16.5 million will be assessed based on future purchases of gas. Costs incurred by the Company since May, 1988 have been recovered through the normal GCR.

REQUIRED PENSION SUPPLEMENTARY INFORMATION
ANALYSIS OF PENSION FUNDING PROGRESS (Unaudited)

Ten-year historical trend information designed to provide information about the Pension Plan's progress made in accumulating sufficient assets to pay benefits when due is presented below:

ANALYSIS OF PENSION FUNDING PROGRESS
 (Thousands of Dollars)
 (unaudited)

Year	(1)	(2)	(3)	(4)	Annual Contribution	(5)	Contri- bution as a % of Covered Payroll	(6)
	Net Assets Available for Benefits	Pension Benefit Obligation	Percentage Funded (1)/(2)	Unfunded Pension Benefit Obligation (2) - (1)		Annual Covered Payroll		Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4)/(5)
1980	\$ 57,857	\$139,132	41.6%	\$ 81,275	\$11,851	\$57,087	20.8%	142.4%
1981	72,371	163,654	44.2	91,283	13,840	61,137	22.6	149.3
1982	91,115	190,323	47.9	99,208	15,181	67,474	22.5	147.0
1983	111,012	N/A	-	N/A	16,276	70,418	23.1	-
1984	129,803	N/A	-	N/A	16,710	75,330	22.2	-
1985	145,845	232,714	62.7	86,869	16,936	80,017	21.2	108.6
1986	169,936	262,394	64.8	92,458	17,571	85,537	20.5	108.1
1987	187,417	275,514	68.0	88,097	16,763	90,139	18.6	97.7
1988	194,818	294,539	66.1	99,721	17,016	96,825	17.6	103.0
1989	207,914	309,266	67.2	101,352	17,748	93,137	19.1	108.8

N/A - Information not available for these periods.

Isolated analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the pension plan's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the pension plan. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the Pension Plan's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the pension plan.

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APPENDIX B
Engineering Report

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INDEPENDENT CONSULTANT'S REPORT
PHILADELPHIA GAS WORKS
GAS WORKS REVENUE BONDS, THIRTEENTH SERIES
MAY 1991



STONE & WEBSTER
MANAGEMENT CONSULTANTS, INC.

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STONE & WEBSTER MANAGEMENT CONSULTANTS, INC.

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May 31, 1991

Honorable David W. Brenner
Director of Finance
City of Philadelphia
1420 Municipal Services Building
Philadelphia, Pennsylvania 19102

Subject: Independent Consultant's Report
City of Philadelphia, Pennsylvania
Gas Works Revenue Bonds, Thirteenth Series

Dear Mr. Brenner:

The attached report contains the findings and conclusions of Stone & Webster Management Consultants, Inc., (Stone & Webster) with respect to the issuance of up to \$75,000,000 of Gas Works Revenue Bonds, Thirteenth Series (the Bonds). These Bonds are being issued in order to fund a portion of the City of Philadelphia Gas Works' (PGW) capital improvement program, and establish sinking fund reserves. Stone & Webster has broad experience in the technical and financial analysis of the operation of a gas distribution system of the magnitude and scope of the Philadelphia Gas Works and has a favorable reputation for competence in such field.

SCOPE OF WORK

Stone & Webster has prepared a detailed report including historic and forecast schedules. The basis for the report is our review of PGW's operations, facilities, and its customer, sales, and financial forecasts. This report provides Stone & Webster's independent assessment of PGW's organization and management, service area, customer base, and sales forecast covering a five-year period from the 1991 through the 1995 fiscal years. The report also provides an assessment of the condition of the physical plant including PGW's existing production, storage and distribution facilities, among others, based upon on-site inspections of facilities. It reviews and evaluates existing and planned natural gas supply contracts with respect to volumes of gas to be delivered and evaluates the adequacy of present inventory, current and future gas supplies, and supplemental gas production capabilities. Furthermore, an evaluation and description of PGW's capital improvement program for fiscal years 1992 through 1997 is addressed with the objective of judging the reasonableness of the major replacements, improvements and benefits which will be made to the gas system.

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The report is intended to provide an overview of PGW's long-term capital program and an assessment of the regulatory and rate setting environment under which the imposition and collection of rates and charges will occur. This financial assessment, based on PGW's 1991 through 1996 financial forecast, is structured to permit the reader to make an estimate of PGW's ability to meet the current and future costs of operation and maintenance, as well as its ability to meet debt service coverage tests and other bond covenants set forth in the legislation which govern debt financing.

FINDINGS AND CONCLUSIONS

Detailed findings and conclusions are contained in the attached report; however, subject to such findings and conclusions, the following points summarize Stone & Webster's key opinions relevant to issuance of the Bonds:

- PGW is a competently managed and operated gas distribution utility. PGW and its facilities are organized, operated and maintained equal to or in excess of regulatory requirements and generally accepted industry practices. Based upon visual observation and limited review of maintenance records, practices and procedures, we believe PGW's in-service facilities are in "good operating condition."
- Based on our investigation and evaluation it is our opinion that over the financial forecast period, 1991 through 1996, on the basis of actual and estimated future annual financial operations of PGW's facilities and certain assumptions with respect thereto over the amortization period of the Thirteenth Series Bonds, current and future project revenues as defined in section 2 of The First Class City Revenue Bond Act (The "Act") will be adequate to meet all expenses of operation and maintenance, repair and replacement, reserve fund deposits, debt service on the bonds issued under the General Ordinance and the surplus requirements of the rate covenants contained in section 4.03(b) of the Ordinance of City Council approved May 30, 1975, Bill Number 1971, as amended (The "General Ordinance") provided that adequate revenues, as discussed in the Financial Considerations section of this report, are provided.
- The Bonds are being issued with the intent of funding the capital improvement program and establishing sinking fund reserves.
- Achievement of the forecasted results, 1991 through 1996, is premised on net revenue increases of \$34.0 million during the next fiscal year (1992), and \$17.0 million in 1995. These could either be through rate increases, expense reductions, efficiencies, increased sales, etc.
- If approved by City Council, the capital improvements proposed during the forecast period, 1991 through 1996, will, along with continued good operation and maintenance practices, enable PGW to maintain its system in good operating condition. Our review of present management practices indicates that the good condition is likely to continue, provided the company is authorized the necessary funds. (Detailed destructive testing and engineering inspections were not performed.)

- Contracted PGW gas supplies plus spot market purchases plus anticipated additional contracted supplies plus supplemental gas capacities are adequate to meet PGW's forecast of demand on a day of maximum demand (a peak day), or an hour of maximum demand (a peak hour), and during a year of maximum demand (a design year).
- PGW's customer count has risen slightly in recent years (0.6% from 1987 through 1990) but is forecasted by PGW to begin to decline. The continuing decline in Philadelphia population (decline of 6.1% between 1980 and 1990) and loss of jobs (decline of 4.0% between 1980 and 1990), if they continue, will eventually limit customer growth.
- Total PGW sales volumes over the forecast period are expected to increase by 0.6 percent per year after weather normalization. Due to an abnormally warm fiscal 1991 (13% warmer than normal), the sales growth will average 2.5% per year above this base year without weather normalization.
- PGW has been without a President and Chief Executive Officer since August 1, 1989 when the former President and Chief Executive Officer, Mr. Robert J. Patrylo resigned. The Philadelphia Facilities Management Corporation organized a Search Committee chaired by Ms. Jacqueline F. Allen, Esq., a board member. The Committee conducted a national search from which 150 responses were received. The Committee interviewed about 20 of the respondents including two internal candidates. The board anticipates a new President will be named in the near future. Mr. Alfred P. Degen, PGW Executive Vice President, has served as Acting President since August 1, 1989.

The accompanying forecasts are based on assumptions of future events and should not be construed as a statement of fact. These assumptions have been provided by or have been reviewed with and approved by PGW and are based on present circumstances and information currently available. During this assignment, we analyzed such information as was considered appropriate for use in evaluating the assumptions pertaining to the financial statement forecasts and, in this connection, it is our opinion that these assumptions are reasonable. The assumptions may be affected by future events and, therefore, the actual results that will be achieved may vary from the forecast.

Sincerely,
STONE & WEBSTER MANAGEMENT CONSULTANTS, INC.

Richard F. Morrow

Richard F. Morrow
Vice President
(Responsible Officer)

Edward A. McGee

Edward A. McGee
Assistant Vice President
(Project Manager)

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INDEPENDENT CONSULTANT'S
REPORT ON THE PHILADELPHIA GAS WORKS

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INTRODUCTION

The Philadelphia Gas Works (PGW), a city owned gas distribution utility in the City of Philadelphia (City), retained Stone & Webster Management Consultants, Inc. (Stone & Webster) to prepare this report in connection with the issuance of up to \$75,000,000 Gas Works Revenue Bonds, Thirteenth Series (the Bonds). Stone & Webster was asked to investigate, evaluate and state conclusions regarding:

- The adequacy of PGW gas supplies;
- The adequacy of current and future PGW revenues to meet operation and maintenance expenses, reserve fund deposits, debt service on the Bonds, lease payments on the Administration building and the requirements of the General Ordinance rate covenants; and,
- The appropriateness of the capital improvements (being financed with the proceeds of the Thirteenth Series Bonds as well as internally generated funds) to maintain the PGW system in good operating condition.

The findings and conclusions regarding these issues are contained in this report. Historical and forecast statistics and related figures are displayed in Figures 1-7, Tables 1-18, and Exhibits I-VI which are an integral part of this report. This report also contains Stone & Webster's independent assessment of PGW's organization and management.

In April and May 1991, a review and evaluation, based upon on-site inspections, was made of production, storage, distribution and general plant facilities. The adequacy of gas supply resources to meet forecast requirements was determined. The capital improvements program was evaluated as to the appropriateness of quantities and estimates of material and labor prices, and justification of improvements and benefits to the gas system. Finally, Stone & Webster prepared an assessment of the regulatory and rate setting environment which

was factored into a series of pro-forma financial forecasts for purposes of analysis. This analysis permitted us to estimate PGW's ability to meet the current and future costs of operations, maintenance and debt service coverage requirements and other bond covenants set forth in the statutes which govern debt financing.

Major factors and key assumptions relative to the forecast and discussed in more detail in the report are:

- **Base Rates** - The Philadelphia Gas Commission has taken an active role in the three most recent proposals for rate changes. On March 3, 1987, the Commission approved a base rate increase for PGW retroactive from January 1, 1987 which provided the Company with approximately \$28.65 million annually in additional revenues. On October 13, 1988, after two months of hearings, the Commission denied a requested base rate increase of \$49 million and PGW was ordered to reduce its rates by \$2 million for fiscal year 1989. On February 5, 1991 the Gas Commission issued an Order which rejected PGW's request for a \$31 million rate increase. However, in connection with the related GCR review (see below), GCR revenues were increased by approximately \$16 million in a normal weather year. In addition, on May 22, 1991, the Commission ordered the further lowering of the fuel component included in base rates increasing the 1991 non-fuel revenues by approximately \$8 million.

PGW anticipates that it will file a request for a base rate increase before the end of the fiscal year 1991 intended to provide additional net revenues of \$34 million during fiscal year 1992. Additional net revenues of \$17 million are anticipated to be achieved during 1995 through a subsequent base rate increase.

- **Gas Cost Rates** - The Commission granted a Gas Cost Rate (GCR) increase which was authorized on August 15, 1988 and which became effective on September 1, 1988. The \$20 million increase represents the increased expenses to

PGW for the purchase of natural gas from its suppliers which is passed on to its ratepayers in the form of a gas cost adjustment, rather than through the base rates.

In connection with the last rate case, the Commission authorized a change to the structure of the fuel adjustment clause which has the net effect of increasing base non-fuel revenues by approximately \$16 million in a normal weather year. More recently a further change was made to this fuel adjustment clause, thereby increasing base non-fuel revenues an additional \$8 million. The current GCR, as of December 1, 1990, is a negative 17.50 cents per Mcf, reflecting a credit on customer bills.

Based on our financial analyses, approval of both of the previously mentioned base rate increases for fiscal year 1992 and fiscal year 1995 and any future GCR proposals or their equivalent net revenue from other sources will be required in order for PGW to meet the enclosed financial forecasts and the terms of its bond covenants.

- Steam Loop Conversion - As of the end of December, 1990, more than 150 customers of the Philadelphia center city steam loop had converted to natural gas. PGW continues to aggressively compete for these conversions and estimates that 35 percent of the steam loop load will be converted to natural gas by 1997. This represents annual sales volumes of 2.0 Bcf by the year 1997. Discussions are also ongoing between PGW and the owner of the steam company regarding the use of gas for generation of the steam. This would, in effect, yield revenues to PGW from non-converting customers.
- During 1989 the Commission authorized a Management Audit of PGW. The audit report, dated November, 1989 contained 149 specific recommendations for improving service and operations as well as reducing costs. PGW is in the process

of implementing many of these recommendations and has factored the expected savings into its projections.

- PGW is continuing with its plans to convert all customers to an automatic meter reading system. This requires the conversion of about 50,000 customers per year for eleven years. Acceleration of the schedule to as few as five years is also being studied. Treatment of this project in PGW's forecast has been conservative since performance tests are not complete - while the required capital expenditures have been estimated on the high side; the savings have been estimated on the low side.

- A recently announced proposal to close the Philadelphia Naval Base and its shipyard, if it were to occur, could decrease PGW's revenues by as much as \$1.5 million (0.3% of billed revenues). This has not been factored into the forecast since it is still just a proposal.

GENERAL

THE PHILADELPHIA GAS WORKS

The Philadelphia Gas Works consists of real and personal property, whether tangible or intangible, owned by the City of Philadelphia, plus the organization and personnel necessary for the acquisition, delivery and sale of gas within the City.

In March 1835 a City Ordinance was passed authorizing private ownership and operation of a public utility under trustee management. This Ordinance also contained an option clause permitting the City to take ownership of PGW by issuing City bonds to the private stockholders. This option initiating City ownership of PGW was exercised March 1, 1841, and has since been continuously in effect. Manufactured gas production commenced February 8, 1836 and service was inaugurated February 10, 1836 to 46 gas lamps along Second Street. PGW thus has completed 155 years of service to the citizens of Philadelphia.

During its 155 years of existence, the operation and management of PGW has evolved to its present configuration through a variety of arrangements. Initially it was managed by the private owners. In 1841, a Board of Trustees assumed management of PGW in accordance with an enabling City Ordinance. This arrangement continued through April 1887 when management and operation of PGW was assumed by the City under the Director of Public Works. Serious financial and operating problems led to replacement of this arrangement on November 12, 1897. At that time, the City, unable to sell PGW, contracted with the United Gas Improvement Company (UGI), now UGI Corporation, for the operation and management of PGW under authority granted by the City Charter. Operation and management by UGI continued through December 31, 1972.

On January 1, 1973 the Philadelphia Facilities Management Corporation (PFMC), a not-for-profit Pennsylvania corporation, was organized for the specific purpose of operating PGW. PFMC currently manages PGW in accordance with the original Agreement with the City dated December 29, 1972 as subsequently amended (Agreement). The functioning of PGW under the current Agreement is as follows:

<u>Organization</u>	<u>Function</u>
City of Philadelphia	Owns PGW property and establishes legislation for PGW functioning.
The Gas Commission	Established under the Philadelphia Home Rule Charter, operates under the terms of the Agreement and is responsible for overseeing operation of PGW by the PFMC.
PFMC	Provides executive management and operates PGW facilities.
PGW	Manages construction, operation and maintenance of the gas system on a day-to-day basis.

The Agreement states that for the operation of PGW the PFMC shall provide:

- A Chief Executive Officer,
- A Chief Operating Officer,
- A Chief Financial Officer, and
- Other personnel as deemed appropriate by PFMC.

All PFMC personnel are subject to the approval of the Philadelphia Gas Commission (Commission). The Commission consists of five members: the City Controller (or his designee), two Mayoral appointees, and two City Council appointees. The Commission has the general responsibility to oversee operation of PGW by PFMC and retains all powers not specifically granted to PFMC. In addition the Agreement specifies certain functions of the Commission, mainly:

- Approval of PFMC personnel,
- Review and make recommendations regarding gas supply contracts for City Council approval,
- Approval of PGW's annual operating budget,
- Review and make recommendations regarding PGW capital budgets for City Council approval,
- Approval of short-term loans,
- Power to establish procurement standards and to fix and regulate rates and charges for supplying gas to customers other than the City and the Board of Education, which will annually produce revenues sufficient to:
 - a) pay all operating and maintenance expenses of PGW and the interest and amortization expense of its debt and,
 - b) pay \$18,000,000 to the City each year and,
 - c) provide such other funds as may be approved by the Gas Commission or City Council.

- Review and approval of all PGW real estate acquisitions, sales, or leases for submittal to City Council for approval by ordinance.

ORGANIZATION AND ADMINISTRATION

The current PGW organization, a typical line organization, is shown in Figure 1. In preparing this study interviews were conducted with the Chairman of PFMC and all of PGW's officers: its acting President and Executive Vice President, each of the three Senior Vice Presidents, and the nine Vice Presidents. The interviews were supplemented by review of PGW policies, practices, procedures and field observation of numerous employees at various facilities performing their functions. Based on these interviews, reviews and observations, it is our opinion that PGW is suitably organized, managed, and operated by qualified personnel.

Total PGW employment as of March 29, 1991 was 2,460. The Gas Works Employees' Union of Philadelphia, Local #686, Service Employees' International Unit (an AFL-CIO affiliated union) represents 1,817 employees. The United Plant Guards Workers of America, Local # 506, represents 40 employees. These figures represent about a 10% decrease from manpower levels prior to 1989 in accordance with the Gas Commission's order of October, 1988, directed at reduction of expenses.

In April, 1989 the Gas Workers Employees' Union went out on strike over a number of issues, including salary issues, in the proposed contract. This strike, settled in May, 1989 with a four-year agreement was the second strike in the history of PGW. The first strike occurred in 1971.

The following brief resumes provide pertinent information on the major management qualifications of the PFMC/PGW Senior Officers:

Alfred P. Degen, Executive Vice President and Acting President

Mr. Degen joined PGW in 1968 and has held management positions in the Finance, Customer Activities, and Administrative areas of PGW, including the positions of Assistant Vice President-Customer Activities, Vice President-Administration and Senior Vice President and Chief Financial Officer. He is a member of the Managing Committee of American Gas Association's Finance and Administrative Section, and the Society of Gas Lighting.

Sydney M. Avent, Esq., Senior Vice President Administration and General Counsel

Ms. Avent joined PGW in January 1984 as Staff Attorney, was named Senior Attorney in December 1984, Corporate Counsel in October 1985, Senior Vice President and General Counsel in January 1988 and Senior Vice President Administration and General Counsel in September 1990. Ms. Avent is a member of the American Gas Association Legal Forum; the past president of the Women Lawyers Division of the National Bar Association; a trustee of the Philadelphia Bar Foundation (1987-1990); and a member of the American and Philadelphia Bar Associations, and the Barristers Association of Philadelphia. She also is a member of the American Association of Blacks in Energy.

Joseph G. Horan, Senior Vice President and Acting Chief Operating Officer

Mr. Horan joined PGW in 1956 and has held management positions in the Operations, Customer Activities, and the Corporate Planning and Development areas, including the positions of Vice President-Operations and Vice President-Customer Activities. He was named Senior Vice President-Corporate Planning and Development on March 1, 1986, Senior Vice President in January, 1988 and Senior Vice President and Acting Chief Operating Officer on September 11, 1990. He is a member of the American Gas Association, and serves on the Managing Committee of the Operating Section, as well as a member of the Government Relations Committee. He is also a member of the Executive Committee of the Associated Gas Distributors and the Society of Gas Operators.

Edward H. Morris, Jr. Senior Vice President and Chief Financial Officer

Mr. Morris joined PGW as Assistant Vice President of Finance in 1984, was named Vice President of Finance in 1986, appointed Vice President and Chief Financial Officer in 1988 and Senior Vice President and Chief Financial Officer in December 1990. He has overall responsibility for PGW's Operating Budget, and the administration and overview of the Accounting and Budget, Treasury, and Claims and Insurance Departments. In addition, Mr. Morris directs the functions of the Customer Activities Department, through the Vice President of Customer Activities. He is a member of the American Gas Association, Board of Trustees of the American Gas Foundation, Financial Executives Institute, and the Government Finance Officers Association.

In January 1991 Joseph Watlington, Jr., was reelected Chairman of the Board of PFMC and James N. Wade was re-elected Vice-Chairman. Other members of the PFMC Board include: Jacqueline F. Allen, Esq., Philip S. Asbury, Esq., Chris van de Velde, Elizabeth H. Gemmill, Esq., and Eric Schnurer, Esq.

SERVICE AREA

Philadelphia Gas Works is the largest municipally-owned gas utility in the nation. PGW purchases, sells, and distributes natural and supplemental gas within the limits of the City of Philadelphia (see Figure 2). The City's borders envelop a predominately urbanized area of 129 square miles in southeastern Pennsylvania along the Delaware River. Within these boundaries PGW maintains a distribution system with approximately 6,000 miles of gas mains and service pipes serving approximately 530,000 customers.

The City is the largest incorporated area in the Delaware Valley region. The 1990 U.S. census, as reported by the Delaware Valley Regional Planning Commission (DVRPC) in April, 1991 counted 1,585,577 inhabitants in the City, a decrease of 6.1% since 1980, and 5,182,705 in the region's nine counties, an increase of 3.2%. The region is comprised of

Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Pennsylvania, and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. The five Pennsylvania counties in the region contain 31% of the state's total population.

Philadelphia's economic orientation has been shifting steadily towards service-related activities. In 1975 the City counted 166,700 manufacturing jobs, (18.9 percent of total nonfarm employment) while in 1990 there were an estimated 97,800 manufacturing jobs (11.3 percent of nonfarm employment). By the year 2000, manufacturing is expected to employ only about 9.8 percent of nonfarm workers.

The main service industries in the City of Philadelphia are insurance, law, finance, health, and education. The relatively low costs of living and office space compared to cities of similar size, along with a prime location at the heart of the Washington-New York-Boston corridor, and the presence of major research universities assures Philadelphia a continuing capacity to attract and retain a dynamic private sector.

Over the past two years, job losses in Philadelphia have more than offset the employment gains that were attained since the 1981-82 recession. This is partly due to the current economic recession. While service jobs increased by 52,000 during the 1980-90 period, manufacturing jobs decreased by 53,000 and other jobs (wholesale/retail trade, finance, insurance, real estate, communications, public utilities, government and construction) all dropped. The net result was a 31,600 net job loss (4.0%) in the City for the decade. At the same time, however, total jobs in the counties surrounding Philadelphia increased by 29 percent.

Due to the recent announcement of the proposed near-to-total shutdown of the Philadelphia Naval Base ten to twenty thousand jobs (including support industries) could be lost in the Philadelphia area. The proposed closing of the Naval Base is scheduled to occur over a five to six year period. The outcome of the Naval Base closing would directly affect PGW since the Naval Base and its shipyard together are PGW's largest commercial/industrial customer.

Indirectly PGW would also be impacted negatively through the job loss of residents employed at the Naval Base or at related service industries. If the closing were to occur, PGW could lose up to 2,500 MMcf of sales volume per year (3.3% of forecasted sales). The revenue impact would be much lower since most of PGW's sales to the shipyard are at a low-margin tariff (LBS-XL Direct). Revenues could be impacted by about \$1.5 million (0.3% of billed revenues). The impact on firm customers would be an increase of about \$3 per year.

On the positive side, the revitalization of Philadelphia's central neighborhoods has included the construction of new office buildings, hotels, and the renovation of existing structures. Many of the City's older sections continue to be rejuvenated through the restoration of existing buildings for residential use.

The possible impact of this revitalization on PGW is not clear. While PGW will indisputably benefit from the growth in commercial market and office space in the City, the residential outlook is mixed. The return of urban professionals and so-called "empty nesters" to the City, attracted by a shorter commute and the advantages of urban life, will be counter-balanced by continuing out-migration by other City residents and the concentration of residential growth outside the City limits. A recent survey by WEFA (Wharton Economic Forecasting Associates) published as the cover story in the April 1 edition of U.S. News & World Report cited the Philadelphia area, including the City, as the top U.S. metropolitan housing market. (Philadelphia was ranked as the number one housing market out of the 95 largest metropolitan areas in the U.S. in terms of expected home appreciation potential for 1991.)

Despite the last decade's population decline in the City, PGW has maintained a relatively constant level of residential customers during the preceding four fiscal years (see Table 1).

Table 2 shows the historical pattern of PGW's sales. In fiscal year 1990, PGW sold nearly 61.5 billion cubic feet (Bcf) to firm customers. The firm unit volumes sold per degree day

have remained fairly constant during the past four years. Firm sales volumes have varied due to changes in the number of heating degree days and the number of firm customers. Total PGW interruptible sales have varied up and down between 10.2 Bcf and 12.5 Bcf over the past four years, with 1990 sales at 10.2 Bcf.

SALES FORECAST

PGW's anticipated sales for fiscal 1991-1995 are shown in Table 3. The 1991 sales forecast is the sum of actual sales experienced during the recently concluded winter and sales forecast for the balance of the fiscal year. The 1991 degree days forecast of 3,997 is 13.1% warmer than normal, and severely negatively affects sales, revenues and ultimately bond coverage ratios. Fiscal 1991 will be by far the warmest year in the last six years and one of the warmest in recorded weather history. The sales impact is approximately 4 Bcf (4,000 MMcf). After 1991, excluding Load Balancing Service (LBS) sales, the forecast for 1992 - 1995 is based on an analysis of historical usage patterns and utilizes a normal (average) weather pattern containing 4,600 degree days. Factors considered include the actual growth or decline in number of customers, changes in rates of consumption by customers in each rate classification, the existing and anticipated price advantage of natural gas over alternative fuels, the availability of natural gas, and the likelihood of PGW's participation in new construction and rehabilitation projects. The forecast for LBS sales is based upon the availability of gas for sale at a competitive price after the demand for gas by all other classes of customers has been satisfied.

Total sales are forecast to increase by 7.3 Bcf or 10.4 percent from fiscal years 1991 through 1995, an average annual growth rate of 2.5 percent. However most of this increase is due to warm weather conditions experienced in 1991, and not anticipated to recur during the 1992 - 1995 period, which yields a lower than normal base for growth. A more accurate assessment of sales growth can be obtained over the period 1992 through 1995 since all years are weather normalized. Sales growth over this period is 0.6% per year. New air

conditioning markets and additional steam system conversions are primarily responsible for this projected growth. In addition to this sales growth, there is a possibility that PGW may transport gas for two cogeneration facilities; for the University of Pennsylvania and for Philadelphia Thermal (operator of the Steam Loop). Should the facilities be built, they would start operations no earlier than fiscal 1993, and would constitute an additional load not shown in the forecast.

Annual firm sales for fiscal 1991 are forecasted at 56.7 Bcf and, under normal weather conditions, are expected to increase to 63.2 Bcf by the end of the forecast period. Overall, the composite growth rate for firm sales is 2.8 percent per year. Weather normalized growth will approximate 0.2% per year.

Interruptible sales are expected to reach 14.1 Bcf in fiscal 1995, representing an average annual growth rate of 1.4 percent over the forecast period.

Table 4 presents PGW's customer forecast. The total number of customers is expected to decrease by 2,204 or 0.4 percent over the forecast period 1991-1995. The number of residential customers will remain fairly constant, declining 0.3 percent for a net decrease of 1,493 customers by 1995. Combined commercial and industrial customers are expected to decline by 782 customers, or 3.1%, while interruptible customers increase by 71 or 20.3%. The numbers of PHA and municipal accounts are projected to be flat.

This forecast includes load growth resulting from new construction, rehabilitation and conversion over the forecast period. Table 5 restates the forecast to illustrate that it envisions a modest increase in market share relative to the City's declining population. In 1991 residential gas customers will account for 71.5 percent of the City's households; it is expected that they will account for 71.9 percent by 1995.

Table 6 illustrates a sensitivity analysis estimating total residential sales under the assumption that PGW's forecasted percent of population served in fiscal 1991 (i.e. market

share) remains constant through the forecast period. At that level, residential sales over the five-year forecast period would be 0.6 Bcf lower than PGW's forecast. Total firm sales would be reduced by 1.0 percent in 1995. This decreased sales level would have a minor impact on PGW's financial position.

PGW's forecast of sales to its firm commercial and industrial markets projects an increase from 9.8 Bcf to 10.5 Bcf over the forecast period without weather normalization. (After normalization it becomes a slight decrease). Included in PGW's forecast is the sale of natural gas to commercial customers presently purchasing steam from the Philadelphia center city steam loop. PGW's marketing department estimates that over 35 percent of the steam loop's load will be converted to gas by 1997 (see Figure 3). This will represent an annual sales volume of 2.0 Bcf by the end of the forecast period. PGW is able to demonstrate a savings to many of these customers relative to the current cost of steam through the use of natural gas. The steam loop has already lost one-third of its customers since 1974 and PGW is aggressively competing for future conversions. For fiscal 1991 the number of steam loop conversions is expected to be low (4 accounts), however the gas usage converted will be significant (191,000 Mcf/year) due primarily to the conversion of one large account.

In general, it is our opinion that PGW's sales forecast is a reasonable projection of sales in light of existing economic conditions within its service territory.

FACILITIES

PRODUCTION FACILITIES

The principal PGW peaking or supplemental facilities include eight city gate stations and two major gas production plants, Richmond and Passyunk. Located at the plants are two liquefied natural gas (LNG) facilities - a gas control center, a recently mothballed propane/air plant, a decommissioned substitute natural gas (SNG) plant and two gas holders.

a) City Gate Stations

Natural gas is received through eight city gate stations from two pipeline transmission companies - Texas Eastern Transmission Corporation (TETCO) and Transcontinental Gas Pipe Line Corporation (TRANSCO). The facilities at each of the city gate stations perform two basic functions - to meter the flow of gas and to control the pressure delivered to PGW's distribution system.

b) Gas Control Center

The gas control dispatchers, located at the Richmond Plant, monitor and control gas flow and pressure from the eight city gate stations to the high pressure distribution system. The gas control dispatchers also provide direction to the production plant operators concerning startup, shutdown and gas flow output from the supplemental facilities. Operations are facilitated through the use of a computer system which includes a backup unit and an auxiliary power supply.

c) Liquefied Natural Gas Facilities

There are two LNG facilities - one at the Passyunk Plant and one at the Richmond Plant.

The LNG storage and vaporization facility at the Passyunk Plant receives its liquefied gas supply from the Richmond Plant via cryogenic trailer trucks. The Passyunk LNG facility consists of one LNG storage tank of 3,066,000 gallons (i.e., the equivalent of 253,300 Mcf of natural gas) and three LNG vaporizers, each having a capacity of 45,000 Mcf per day.

The Richmond LNG plant has one of the largest facilities in the U.S. for liquefaction in addition to storage and vaporization. During the non-heating season, PGW uses the Richmond LNG Plant to liquefy and store natural gas from the pipeline. The plant has the capacity to liquefy and store approximately 23,500 Mcf per day and the two storage tanks have a combined capacity of 48,970,000 gallons of LNG (4,045,800 Mcf). Regasification of the liquid is accomplished with six 100,000 Mcf per day (nameplate capacity) vaporizers. Due to design changes, the originally installed vaporization capacity was reduced to about half its nameplate capacity. See the Capital Improvement section of this report for details of ongoing and proposed expenditures to return the capacity to original levels.

d) Propane/Air Facilities

The Passyunk propane/air plant has the air compression and propane vaporization capacity to produce 60,000 Dth of propane/air mix per day (45,000 Dth per day planning basis) and has a liquid propane storage capacity of approximately 662,250 gallons. This facility is being mothballed this year since its use is not anticipated in the current gas supply forecast before 1996, and then only in design weather conditions.

e) Substitute Natural Gas Facilities

The Passyunk Plant SNG facility is inoperative. However, many components of the plant including a water demineralization unit, boilers, and air compressors are being utilized in the day-to-day operations of other portions of the Passyunk plant.

f) Gas Holder Storage Facilities

Both Richmond and Passyunk plants each have a low pressure gas holder. These holders have operating capacities of 3,000 Mcf and 6,000 Mcf for Richmond and Passyunk plants, respectively. The holders were installed in the manufactured gas era and are in good working order. Holders are used for keeping daily pipeline purchases within contract limitations and for hourly peak shaving requirements.

DISTRIBUTION FACILITIES

The principal gas distribution facilities consist of approximately 3,012 miles of main, 503,439 services, 205 regulator stations, 522,018 active meters, miscellaneous valves, instruments and other appurtenances. There are five different operating pressure systems, each system is connected to the other by control regulators. The high pressure systems operate at approximately 100, 60, and 35 psig; the intermediate pressure system operates at 5 psig; the low pressure system operates between 6 and 9 inches of water column (approximately .25 psig). The majority of customers are served from the low pressure system.

Approximately 62 percent of the gas mains are cast iron pipe, 32 percent steel pipe, 5 percent ductile iron pipe and less than 1 percent are plastic pipe. Approximately 67 percent of the services are steel and 33 percent plastic. The part of the steel system subject to corrosion is cathodically protected.

OTHER FACILITIES

PGW has its executive and operating offices located at 800 W. Montgomery which is a relatively new 150,000 square foot office building. The former general office building houses distribution and customer service dispatch centers, service stations, and warehouses, as well as management information systems, a meter repair shop, and a metal fabrication shop. Additional facilities include eight district offices and four operating stations for customer service and distribution crews. In addition, there are a warehousing facility and an automotive maintenance and repair facility. The automotive maintenance and repair facility is responsible for the upkeep of PGW's fleet of over 1,000 vehicles and equipment. PGW also maintains minor automotive repair facilities at three of its operating stations.

CONDITION OF FACILITIES

In April and May, 1991 Stone & Webster conducted site inspections of certain PGW facilities as deemed appropriate. In the course of these inspections the following facilities were visited:

- 800 W. Montgomery
 - General Offices
 - Network Analysis Work Stations

- 1800 N. 9th Street (former general office building)
 - Meter Repair Shop
 - Meter Warehouse
 - Distribution and Customer Service Dispatch Center
 - Distribution and Customer Service Work Stations

- 1849 N. 9th Street
 - Transportation facilities

- City Gate Stations
 - Ashmead (TRANSCO)
 - 034 (TETCO)
 - Ivy Hill (TRANSCO)
 - Richmond (TRANSCO)

- Hunting Park
 - Warehouse

- Passyunk Plant
 - SNG Plant (deactivated)
 - LNG Facilities
 - Propane/Air Facilities (mothballed)
 - Gas Holder Facilities
 - Training Center

- Richmond Plant
 - LNG Plant
 - Gas Control Center
 - Gas Holder

- Work Sites
 - Hartell St. & Barnes St.: 12" x 16" cast iron cutout to tie in new 16" coated and wrapped steel main laid by outside contractor.

 - Algon Ave. & Hoffnagle St.: 2" plastic main extension off existing 6" steel main, and two new 1¼" plastic services.

■ Large Volume Meters

- Temple University Physical Plant (Montgomery Ave. & 10th St.)
- Germantown Hospital Boiler House (633 East Penn St.)

■ District Regulators

- Townsend St. & McNulty St. 3-yr scheduled overhaul.
- Ditman St. & Pennypack St. overhaul.

In addition to the site inspections, Stone & Webster interviewed the Senior Vice President and Acting Chief Operating Officer, the Senior Vice President and Chief Financial Officer, the Senior Vice President and General Counsel, Vice Presidents of Operations, Marketing, Customer Activities, Administration, Support Services, Technical Services, Rates and Federal Regulatory Affairs, Public Affairs, and Government and Community Relations, and the managers and superintendents of Distribution, Accounting and Budget, Transportation, and Gas Supply Departments. On this or on previous inspections we reviewed construction, maintenance and operating practices, system design criteria, inventory levels, material and construction standards, safety, regulatory compliance and maps and records.

PGW maintains maps and other records of the distribution system in good order, and has comprehensive written construction, operating and maintenance standards and procedures. Its personnel are well trained in the operation and maintenance of the gas distribution system. Their highest operating priority is response to emergencies and the maintenance of a safe gas distribution system. Security measures were judged to be excellent at the major facilities visited such as the two production facilities, the city gate stations and the headquarters building.

Based on the inspections and interviews conducted, it is our opinion that PGW operates and maintains its system prudently and in accordance with current regulatory and generally accepted industry practices.

GAS SUPPLY

SUPPLY SOURCES

PGW has natural gas contracts with two major interstate pipeline companies - Texas Eastern Transmission Corporation (TETCO) and Transcontinental Gas Pipe Line Corporation (TRANSCO). Collectively these pipeline companies deliver virtually all of PGW's supplies over the forecast period. In order to utilize these contracts in an economic manner, PGW has contracted for a variety of storage services and owns and operates two LNG plants which also serve a storage role. These natural gas options permit the matching of supplies to winter-period peak demands.

A year ago, PGW converted two former TETCO contracts (DCQ and GSD) to two new agreements (CD-1 and CD-2), respectively. The new agreements allow a portion of the gas to be transported under a firm and more economical arrangement. (In recent years, since the Federal Energy Regulatory Commission permitted pipeline services to be unbundled, transported gas has in general been substantially less expensive than non-transported pipeline sales gas.)

PGW also signed a new supply agreement with TRANSCO a year ago permitting the conversion of all of its year-round entitlements to more economical firm transport contracts. Nearly half (80,000 Dth) was converted to PFT firm transportation service which is supplied through long term arrangements for the purchase of lower priced gas. The remaining 85,212 Dth was converted to LTFT firm transportation on an annual renewal basis and is supplied through three separate gas purchase contracts with varying terms. PGW will have an option to either extend the term of the conversion this year, or convert back to the more traditional pipeline system supply. A third flowing gas contract on TRANSCO, PS-6, takes the place

of the former PS-3 contract. However it is now a transport service instead of a sales service and it is available for 90 days instead of 30 days.

The complete mix of contracts utilized by PGW is described in Table 7, There are seven existing contracts on the TRANSCO system and seven existing contracts on the TETCO system.

On the TETCO system PGW employs four storage contracts (SS-I, SS-II, SS-III, and Equitrans). The SS-II and SS-III remain unchanged from last year. The Equitrans contract has changed only in name, being the former Keystone storage. The new SS-I storage service was converted from the former WS winter service with equivalent capacity and deliverability.

On the TRANSCO system, PGW's four storage contracts (GSS, S-2, WSS, and LGA) remain unchanged from last year. The LGA contract however has been leased to an outside company.

PGW also owns supplemental LNG and propane/air facilities to meet contingent winter demand in excess of pipeline and storage supplies. LNG is produced from pipeline gas during the summer and stored in PGW's two large facilities and one satellite tank within the City. The Richmond plant has a total nameplate vaporization capacity of 600,000 Mcf per day. However, it was determined two years ago that the current capacity was approximately 50% of this amount due to design modifications. Capital improvements have been undertaken to restore the plant's vaporization capacity. Current capacity is 450,000 Mcf per day. The Passyunk plant's installed vaporization capacity is 135,000 Mcf per day.

Propane/air (LPG) can be produced from PGW's Passyunk plant at the rate of 60,000 Dth per day. In normal practice this output has not been required, although about 75,000 Mcf was produced and sold each year to keep the plant's facilities ready for design weather conditions. This facility is being put on inactive status since the current gas supply forecast

does not require its use until the last year (1996) of the forecast period and then only under design weather conditions.

Figure 4 pictorially depicts the sources of peak day gas supply available to PGW.

SUPPLY/DEMAND BALANCE

Table 8 restates PGW's forecast of supply and demand under normal weather conditions (4,600 HDD) for fiscal years 1992-1996. Over this period it is expected that daily flowing pipeline deliveries (including storage deliveries) will account for substantially all of PGW's requirements.

Table 9 restates PGW's forecast of supply and demand under design weather (5,280 degree days) conditions for fiscal years 1992 - 1996. Daily flowing pipeline supplies account for approximately 82 percent of total demand and storage gas (underground or pipeline) accounts for approximately 14 percent of demand throughout the forecast period. Remaining demand (approx. 4%) is met with LNG (and LPG in 1996).

As shown in Table 7, the pipeline contracts provide PGW with up to 107 million Dth annually. This amount is greater than any year's projected firm demand (under either normal or design weather conditions) during the forecast period. To the extent practicable and most prudent, PGW intends to reduce its total cost of gas supplies through the direct purchase of natural gas from producers (i.e., off-system gas) or through the purchase of pipeline gas having a price equivalent to a spot market price. In recent years purchases of these supplies have increased significantly accounting for over 40% of PGW's gas purchases in 1989, 73% in 1990, and an estimated 82% in 1991.

Table 10 restates PGW's forecast of supply and demand under peak day and peak hour conditions. Sendout requirements are based upon the assumptions of a winter week day with an average daily temperature of zero degrees Fahrenheit (F) (65 Heating Degree Days)

and an hourly peak temperature of minus five degrees F (70 HDD). Under these conditions interruptible sales are planned to be suspended in accordance with provisions in the contracts for such rates. Under peak day conditions, projected firm demand could be met throughout the forecast period by pipeline deliveries and the use of PGW's LNG capacity. In only the last forecast year (1996) is propane/air required on any forecast peak day. Figures 5 A and B compare peak day and peak hour demand to PGW's maximum sendout capability for each of the forecast years. Figure 5B shows a small sendout safety factor exists for a peak hour's demand.

The maximum daily sendout during the 1989-1990 winter was 649.0 MMcf (671 MDth) on December 22. The average daily temperature on that date was 12 degrees Fahrenheit. Demand was satisfied with 453.7 MMcf (469.0 MDth) of pipeline gas, and 195.3 MMcf (202.0 MDth) of LNG. No propane was available due to widespread curtailments throughout the U.S. Two days later, on December 24, PGW faced an unplanned pipeline curtailment. Even though demand was lower than on the peak day, amounting to 567.3 MMcf (587 MDth), dispatching was more difficult. Only 345.9 MMcf (358 MDth) of pipeline gas was available and propane was still unobtainable. PGW met the difference of 221.4 MMcf (229 MDth) entirely from its LNG supplies. During the last winter (1990-1991) the peak sendout occurred on January 22, 1991 when an average temperature of 17°F was recorded. Sendout totaled 608.2 MMcf (627.2 MDth) and was derived 67% from pipeline gas, 33% from LNG, and less than 1% from LPG.

In summary, based upon our review of PGW's gas supply acquisition policies, proposed budget, and the analyses described herein, it is our opinion that supplies of natural gas and LNG normally available to PGW are more than adequate to meet PGW's forecast of peak hour, peak day and peak year demand through the 1996 fiscal year.

CAPITAL IMPROVEMENT PROGRAM

BUDGET PROCESS

PGW's capital budget and five-year forecast are the result of a process in which a list of budgeting and operating assumptions is developed and circulated to all departments. Individual departments use these assumptions as well as certain agreed upon economic parameters to prepare the capital requirement estimates that form the basis for departmental budgets. These budget requirements and forecasts are based on meeting PGW's design hour and design day forecasts that are prepared by the Energy Planning and Forecasting Department. The major operating departments determine their capital requirements by identifying the capital improvements necessary to safely and reliably meet the system-wide conditions calculated for a design day of zero degrees F average temperature and a minus five degrees F design hour.

All capital projects and requests are assigned a priority: the highest priority (priority 1) is reserved for expenditures required to maintain the integrity of PGW's system, the next priority (2) indicates expenditures required to improve system efficiency, and the last priority (3) is used for other expenditures which may be of a more discretionary nature. In addition to being assigned priorities, capital projects are also classified according to the following categories of needs:

- Prudent Replacement - replacement of existing facilities that are nearing the end of their useful life.
- Economic Replacement - replacement of existing facilities with alternatives that are more cost effective.

- Load Growth - provision of facilities necessary to supply customers having additional load requirements.
- Improved Efficiency - reduction of future operating costs.
- Enforced Relocation - mandated by City, State or other outside construction activities.
- Other - any other projects that do not fit into the previously defined categories.

Proposed capital expenditures for both the fiscal 1992 capital budget and the five-year capital forecast (fiscal 1993 through fiscal 1997) total \$371.1 million net. These expenditures are summarized in Table 11A and Exhibit IV and shown graphically in Figures 6 and 7.

The proposed fiscal 1992 capital budget totals \$56.9 million net with distribution system expenditures accounting for 64.6 percent, gas supply for 15.3 percent, customer service 8.8 percent, transportation 5.8 percent, and other expenditures 5.5 percent. This budget is \$4.8 million (7.8%) less than last year's budget (fiscal 1991). The fiscal 1992 gross budget of \$59.6 million is comprised of \$48.5 million (81.3%) of replacements and \$11.1 million (18.7%) of additions.

Broken out by priority, 77% of the proposed fiscal 1992 gross capital budget is categorized as priority 1, (essential for safe and reliable service), 20% as priority 2 (will reduce future operating costs) and 3% priority 3 (discretionary). Broken out by needs categories, the fiscal 1992 gross budget is allocated primarily to prudent replacements (\$33.6 million or 56.5%), enforced relocations (\$10.4 million or 17.4%), and load growth (\$8.8 million or 14.7%). The remaining \$6.8 million (11.5%) is either for economic replacement, improved efficiency, or other needs.

Table 11B lists the twelve largest items in the fiscal 1992 capital budget. These are all of the items budgeted at over one million dollars each. Together these twelve major projects account for \$43.7 million or 73.2% of the total budget. These same twelve project categories (eleven of which are annual recurring items) also accounted for \$43.7 million of last year's budget. This indicates that in general both the largest projects and the majority of PGW's budget are accounted for by annually recurring activities.

GAS SUPPLY PLANT

Proposed investments for additions and replacements to PGW's gas supply plant total \$47.8 million for the six year budget and forecast period. There are no major new gas supply projects planned in this time period; all of these expenditures are for upgrading and modernizing facilities including necessary replacements. The majority of these expenditures will be for supplemental gas facilities at the Richmond and Passyunk facilities. The Richmond LNG facility was originally built 23 years ago with a sendout capacity of 500 MMcf per day and by 1980 was upgraded to 600 MMcf per day with the addition of a new heater and a new vaporizer. Design changes required to safely and reliably operate the plant have caused a significant degradation in the sendout capacity. In December 1989 an extreme cold weather spell required the use of all of the vaporizers and confirmed the degradation in capacity to approximately 300 MMcf per day. Since then new equipment has partially restored capacity to 450 MMcf per day. A portion of the budget and forecast expenditures is to support the continuing work to restore the Richmond LNG plant's sendout capacity.

The largest expenditures scheduled for the Richmond Plant include: \$5.0 million for increasing the carbon dioxide removal capacity of the pretreatment section, \$3.6 million for incremental replacement of heaters, \$3.6 million for incremental replacement of LNG plant instrumentation, \$3.6 million for incremental replacement of refrigerant and process piping, \$1.4 million for LNG vapor bypass facilities and \$1.2 million in each of two years for air

pollution control equipment on the LNG compressors. Other large capital expenditures for gas plant during the six year period include \$3.1 million to replace high pressure boilers and \$1.5 million for the demolition of an obsolete boiler room, compressor buildings, and associated equipment at the Passyunk Plant. Other proposed expenditures are less than \$1 million each.

DISTRIBUTION PLANT

The proposed expenditures for capital improvements to PGW's distribution system in the fiscal 1992 to 1997 budget and forecast period total \$255.9 million before credits of \$15.5 million for salvage and reimbursement to yield a net total of \$240.4 million. Main and service replacements amounting to \$207.0 million and additions of \$48.9 million account for 80.9 percent and 19.1 percent respectively of the total gross capital expenditures. The fiscal 1992 budget calls for net capital improvements to distribution system of \$36.8 million after allowances for salvage and reimbursement of \$2.3 million.

The largest capital expenditures for the distribution system are scheduled for the replacement of small diameter (1.25 inches or less) services which account for \$91.5 million of the six year total including \$13.7 million for the fiscal 1992 proposed capital budget. These expenditures are scheduled for the renewal of approximately 9,100 services annually based on customer complaints and leaks as well as replacements in conjunction with main replacements. Planned new service additions will account for \$3.8 million of the fiscal 1992 budget and \$24.7 million over the entire period.

Prudent main replacements for intermediate and low pressure mains of small diameter (8 inches or less) amount to \$6.8 million of the fiscal 1992 budget and \$45.7 million over the six year period. These amounts are based on the need to replace 40,000 feet of cast iron main annually for maintenance history reasons. A similar amount of footage is expected to be replaced in conjunction with City and State work programs. Main replacements due to

anticipated city and state construction activities involve \$9.4 million of proposed expenditures for the fiscal 1992 budget and \$54.7 million for the total six year period.

CUSTOMER SERVICE

PGW's planned customer service related investments total \$43.7 million net after consideration of \$1.1 million for contributions and salvage over the six year period. The proposed 1992 budget expenditures amount to \$5.0 million on a net total basis. Meter replacements, additions and installations will total \$31.4 million for the six year period including \$4.7 million for the proposed 1992 budget.

Implementation of the Automatic Meter Reading (AMR) program, slowed from its original schedule over the past three years, will be accelerated. PGW has filed a comprehensive installation plan and is currently conducting a cost/benefit analysis to evaluate the merits of installation on different time schedules. A performance test is planned for later this year. The fiscal 1992 budget does not contain any funds requested for the AMR program because current expenditures involve previously approved budget items that are only now being implemented as the result of slowing the implementation program. The budget forecast includes \$10.7 million for the AMR program with the first of these expenditures to occur in 1995.

TRANSPORTATION

Capital expenditures for transportation by PGW total \$20.8 million less \$1.5 million expected for vehicle and equipment salvage during the six year budget and forecast period. Vehicle replacements will account for 69.0 percent of the total; mobile equipment replacements 12.6 percent, and the remaining 18.4 percent of the expenditures is planned for miscellaneous equipment.

OTHER DEPARTMENTS

The balance of PGW's budgeted and forecasted capital expenditures amount to \$19.8 million over the six year period including \$3.1 million proposed for fiscal 1992. The departmental expenditures are \$10.5 million for building services, \$4.9 million for information systems, \$4.0 million for customer activities, and \$0.4 million for materials management. Building services expenditures include funding for building alterations, furniture, office machines and equipment, tools and machinery, paving and structural repairs to PGW buildings and parking lots, an N.G.V. (natural gas vehicle) service station, air conditioning systems, and electrical systems. The largest customer activities budget item is a PBX system scheduled for 1996. The largest information systems expenditures involve \$2.0 million forecast for 1996 for a new central processing unit and \$0.8 million split between 1994 and 1996 for replacement tape drives.

RECENT DEVELOPMENTS

PGW's proposed capital budget for 1992 and its five-year forecast were filed with the Commission on March 14, 1991. The City's Finance Director gave a favorable recommendation to the Commission regarding PGW's proposed capital budget but did recommend that the fiscal year 1992 capital budget be reduced from \$56.9 million to a "more appropriate level not to exceed \$43 million".

The Commission noted that PGW's proposed 1992 budget of \$56.9 million (net) includes \$35.2 million to be spent in fiscal year 1992. PGW also proposed carrying forward \$40.6 million of previously approved but not fully spent funds from prior years including \$20.4 million to be spent in fiscal year 1992. This totals \$55.6 million for 1992 spending. The Commission recommended that the City Council approve the \$55.6 million, and ordered PGW to change its accounting procedures to lapse funds associated with recurring or normal capital projects to which a firm commitment has not been made.

The Commission recommended that the City Council order PGW to reprogram its previously authorized but unspent funds such that a maximum capital authorization is in place. The Commission further recommended that PGW, in cooperation with the Public Advocate, Gas Commission, and Finance Director, develop a project list to allocate this capital authorization maximum of \$61 million. To date the City Council has not acted on the Gas Commission's recommendations regarding PGW's proposed capital budget for 1992.

CONCLUSION

Based on discussions with PGW's management and our review and evaluation of PGW's proposed fiscal 1992 capital budget and forecast capital expenditures for fiscal 1993 through 1997, it is our opinion that the budget is consistent with PGW's corporate objectives and is appropriate for maintaining a safe natural gas distribution system for Philadelphia. PGW's objectives for the proposed capital budget are to provide and maintain the necessary facilities to ensure PGW has the capability to deliver safe, reliable service that is cost effective for existing and future customers. (See also following sections on Regulatory Environment and Rate Schedules and Developments.)

FINANCIAL CONSIDERATIONS

REGULATORY ENVIRONMENT

The Philadelphia Home Rule Charter contains provisions for the establishment of the Philadelphia Gas Commission (Commission) to regulate the activities of PGW. Under the Management Agreement the Commission's powers and duties include: establishing PGW's rates and related charges, approval of certain management personnel selections by PFMC, approval of operating budgets, review of the capital budget and gas supply contracts prior to approval by City Council, review of PGW's books, records and accounts, setting standards for the procurement and disposal of material, supplies and services, and approval of any changes in gas quality standards. The Commission's five members include: the City Controller, two Mayoral appointees, and two City Council appointees, or their respective designees. Municipal ownership of PGW means that all rate regulation authority is held by the Commission and not by the Pennsylvania Public Utility Commission.

Requests for rate and tariff changes are initiated by PGW based on anticipated revenues, expenses, capital expenditures and debt service coverage. The Commission holds public hearings on proposed rate changes at which PGW and other interested parties are permitted to present evidence supporting their positions regarding the proposed rate change. Community Legal Services, Inc. was first appointed in 1988 to be the Public Advocate in rate hearings to represent residential customers. The Commission issues orders based on its findings from the evidence and information available. Subsequent to the issuance of orders, an appeals process is available that includes a petition for reconsideration and rights of appeal through the courts. The Commission, through its regulatory review and orders, seeks to obtain a balance between the concerns of PGW, the City and the customers with an increasing emphasis on needs of the low-income customer. PGW makes a considerable

effort to work with the Commission to keep them informed on all of the important matters that affect the company.

Over the past five years PGW has filed three base rate increase requests and gone through a Commission-authorized management audit.

- In May 1986 PGW filed a request for a base rate increase designed to produce \$59 million beginning with the 1987 fiscal year. In March 1987 an increase was approved which provided the company with additional revenues of \$28.65 million, retroactive to January 1, 1987.
- In June 1988 a rate increase request was filed for an additional \$49 million in revenues for the fiscal year beginning September 1, 1988. In October 1988, after two months of hearings, the Commission denied the requested rate increase and ordered the company to reduce its rates to reflect a reduction in revenues of \$2 million beginning in fiscal year 1989. The Order directed PGW to reduce expenses in certain areas in order to meet its financial obligations.
- In November 1989 the results of a Commission-authorized audit of PGW's management and operations became available. The results of the audit included 149 recommendations for improving PGW's operations. The Commission ordered PGW to implement 10 of the recommendations immediately and a task force was formed to review possible implementation of 64 additional recommendations.
- In May 1990 PGW proposed an operating budget for fiscal year 1991, which included a proposed base rate increase intended to generate \$31 million in additional net revenues during fiscal year 1991. The rate increase application was filed on June 29, 1990. On February 5, 1991 the Commission issued its Order which effectively denied the request and ordered the company to maintain its existing level of base rates. (However, refer also to GCR discussion below.)

In addition to its base rates, PGW has a gas cost recovery (GCR) adjustment designed to permit the company to adjust its charge to firm customers, on a quarterly basis, to recover its actual cost of purchased gas. The projected cost of purchased gas is calculated and recovered from customers on a levelized basis in part from a component included in the base rates and in part from the GCR adjustment. GCR collections, which may be positive or negative, together with the cost of gas included in the base rates are then matched against actual costs for the year. Any differences are then charged or credited to purchased gas costs in the next annual forecast period. The GCR may be changed quarterly if necessary. Effective September 1, 1990, the cost of gas included in the base rates was changed to \$3.33/Mcf. (On May 22, 1991, the Commission issued an additional order lowering the cost of gas in the base rates to \$3.18/Mcf.) The most recent GCR, effective December 1, 1990, is a credit of \$.1750/Mcf to the base rates for all quantities of gas.

The Commission performs an annual review of the GCR procedure. Although it is usually conducted as a separate proceeding, the Commission incorporated its most recent review within the scope of the last rate case. This review, which was more technically comprehensive than in previous years, included an investigation into fuel planning and gas purchasing practices of the company. After extensive examination, the Commission and the Public Advocate concluded that PGW's gas procurement has fulfilled applicable regulatory requirements by utilizing least-cost gas supplies and maintaining overall system reliability.

Also, in connection with the GCR review, the Commission issued an order in the rate case which authorized an adjustment to the structure of the fuel adjustment clause (GCR) which has the net effect of increasing base non-fuel revenues by approximately \$16 million in a normal weather year.

PGW is planning for a rate increase to meet its expected costs for the 1991-92 fiscal year and another later in the forecast. In light of what has happened to date regarding implementation of both the cost-saving measures stemming from the management audit and the Commission's cost-cutting directives, the regulatory outlook may be more positive for

future rate increases since identified expense reductions are largely complete. At the same time however worsening financial problems in the City exert mounting pressure to limit rate increases.

ENERGY ASSISTANCE PROGRAMS

High accounts receivable balances and a large number of delinquent accounts have occurred at PGW for several years. PGW has taken a proactive position in assisting customers in meeting energy costs. The company works closely with community and legislative groups at the city, state and federal level to increase funding for energy assistance programs. As a result of its activities these financial assistance programs provided a total of \$14.2 million in aid for the 1990 fiscal year.

The Federal Government's Low Income Home Energy Assistance Program (LIHEAP) provides a payment to households which are at or below 150 percent of the federal poverty level in order to help ensure continued utility service. Philadelphia's gas consumers make application through PGW's eight (8) neighborhood offices, Department of Public Welfare and many community sites with the funds going directly to PGW for crediting to the customer's account. For the last full program, which ran from October 16, 1989 through April 27, 1990, 43,523 PGW customers received \$9.2 million of LIHEAP funds for an average of \$211.38 per customer. PGW customers also received assistance from the LIHEAP Crisis program with 14,250 customers receiving \$4 million for an average of \$280.70. The current LIHEAP program, which began October 15, 1990 and ended April 29, 1991, has, as of April 15, 1991, provided an average grant of \$192.00 to each of 40,405 customers. Through April 7, 1991, 8,269 customers received \$2.3 million for an average of \$176.00 in assistance from the current LIHEAP Crisis program.

A "five-and-two" budget repayment program was established to assist customers in paying current bills and eliminating past arrears. Five percent of the balance is required as a down

payment with two percent per month paid on arrearages, in addition to full payment of current bills on an equal monthly budget plan. In return, PGW will forgive up to 50 percent of the arrearages on a schedule which provides for a graduated forgiveness based on percent of the arrears paid. As of August 1990, there were 37,035 delinquent customers who had a "five-and-two" percent repayment agreement, of which 17,917 were active with a total receivable balance of \$14.3 million. This program, like LIHEAP, is subject to 150 percent of the Federal income poverty test.

PGW has established a Vendor Payment Program for a group of customers known as Scattered Site Tenants of the Philadelphia Housing Authority (PHA). These customers occupy dwellings, usually single family homes, owned by the PHA and whose rental is subsidized by the Federal government. Under an agreement with the PHA and the Scattered Site Tenants, the Federal government's Department of Housing and Urban Development provides a utility allowance to PHA, on behalf of the tenant, which is then assigned to PGW. About 40 percent of the 5,600 Scattered Site Tenants are currently participating in the Vendor Payment Program.

PGW is also participating in the Utility Emergency Services Fund (UESF) which is a private fuel fund set up with the assistance of the City of Philadelphia Water Department, Philadelphia Electric Company and Philadelphia Gas Works. Under this program, customers at or below 150 percent of the poverty level may make application for an energy assistance grant (LIHEAP) which together with their own payment, a grant from UESF, and a matching contribution from PGW, the customers will be able to zero-out any arrears they may have. The maximum allowance that a customer may receive is \$500; \$250 from UESF and a matching grant of \$250 from PGW. For the last fiscal year, approximately 2,591 PGW customers received a total of \$1 million.

In February 1989 PGW implemented a program called "Dollar Plus" wherein PGW's customers were asked to add \$1.00 or more to their gas bill payments as a donation to the

Utility Emergency Services Fund. For fiscal 1990 there were 59,343 Dollar Plus payments with contributions totaling \$60,605.41 an average donation of \$1.02.

For customers whose income is above the poverty level, PGW has a 20 Percent Down Payment Plan. Under this plan the customer pays a 20 percent down payment on any arrearages and the balance is paid over a period as long as 24 months. In addition, consumption is budgeted for the next year and payment is made in twelve equal monthly installments. As of August 1990, there were 76,852 delinquent customers participating in the 20 percent repayment agreement, 29,945 of which were active with a total receivable balance of \$11.9 million.

Lastly, in March 1990 PGW reached a negotiated settlement with the Commission regarding proposed changes to the existing customer service regulations which included a two-year pilot program to keep customers on line by having them pay at least a portion of the amount due as long as it covers some portion of the costs. Known as the Energy Assurance Plan (EAP) the customers in the program must be at or below the 150 percent poverty level and are asked to pay a percentage of income (5, 7 or 8 percent depending on income level) plus \$4 per month toward any arrears up to a set maximum amount. After a three month history of payment compliance is established, a proportional amount of the arrearages will be written off monthly based on the difference between current usage and the percentage of payment amount. As of March 1991 approximately 5,300 customers have met the program requirements and have been enrolled in the EAP plan. In February 1991, the Commission ordered PGW to open the EAP to an additional 10,000 participants.

PGW has also been active in promoting its Conservation Works Program which is the weatherization energy conservation segment of EAP. As a result of this program, the company anticipates savings in gas usage of up to 20 percent.

PGW offers a senior citizen discount program to customers age 65 or older. The discount is 20 percent of the total gas bill. As of March 1991 there were about 103,000 customers

taking advantage of the senior citizen discount. There are no income requirements for this program.

The company has many techniques which it utilizes to inform the community about the energy assistance programs that are available to them. It works with the Emergency Fuel Group, which is a coalition of approximately 300 community organizations around the city and the region, to get word out about energy assistance programs. Its other activities include monthly consumer roundtables, speakers bureau in different Philadelphia communities and individual telephone calls (in fiscal year 1990 PGW made approximately 60,000 calls to inform customers about programs available.)

PGW is actively involved in other community programs including Parents Against Drugs, the Career Exploration for Youth (CEY) program in schools, and the Project Philadelphia Regional Minorities in Energy (PRIME) program which highlights math and science opportunities to minority students. Work Force 2000, which works hand-in-hand with the PRIME program, is part of an effort on a national level with the American Gas Association and approximately 300 member companies, including PGW, to ensure a qualified workforce in the year 2000.

The company's active support and participation in programs such as these are anticipated to enhance its image in the community and help to reduce the amount of uncollectible accounts and thereby benefit all ratepayers.

RATE SCHEDULES AND DEVELOPMENTS

In order to be responsive to its Management Agreement with the City to offer non-discriminatory rates based on suitable and reasonable classifications as well as to meet the needs of its consumers and remain competitive with alternate energy sources, PGW offers a range of rate schedules.

The company's tariffs can be categorized as either firm or interruptible. Firm service provides gas under rate schedules for which the company does not anticipate any interruptions. Interruptible service is offered to large volume customers under contracts that permit service interruptions, usually on short notice during peak load conditions or when specified low temperatures are reached. During fiscal year 1990, 85.7 percent of PGW's gas sales were provided as firm service to residential, commercial and industrial customers. Interruptible sales accounted for 14.3 percent of total sales. Most firm customers are served under the General Service (GS) rate which has a flat rate for all consumption and a separate monthly charge for each customer group. Municipal and Philadelphia Housing Authority sales are served under separate firm rate schedules (MS and PHA) and represented 4.7 percent of PGW's total sales for fiscal year 1990. Sales for resale accounted for 0.1 percent.

Interruptible customers are served under various rate schedules including Load Balancing Service (LBS) and Boiler and Power Plant Service (BPS). BPS is a flex rate which is set in relationship to the posted price of No. 2 (home-heating) fuel oil. Customers on this rate are generally only interrupted when temperatures reach 18-degrees-Fahrenheit. LBS is a flex rate which is set in reference to the posted price of No. 6 (industrial) fuel oil.

The company also offers a Gas Transportation Service (GTS) rate. It provides for transportation of customer-owned gas under flexible rates with a cap equal to the margin of the customer's equivalent sales rate. The GTS rate was designed to provide a revenue-neutral approach for PGW for existing interruptible customers that are seeking either interruptible or firm transportation services for their gas supplies.

PGW continues to offer an Economic Development Discount (EDD) rate that first became effective in 1984. This rate provides for a 15 percent discount to certain large volume customers with significant investments in gas-burning equipment that can increase consumption by more than 1,500 Mcf per month above a base level. The EDD rate discount can be in effect for up to three years.

In conjunction with the most recent Commission rate case order, several rate structure revisions were approved. One significant change was to create a new Load Balancing Service-Extra-Large-Volume (LBS-XL) rate which would be comprised of the largest customers in the existing Load Balancing Service-Large Volume (LBS-L) rate. Both rates would have essentially the same terms, i.e., the ability to set the rate within a range of 10 percent above to 20 percent below the posted tank car price for No. 6 oil. However, as a flex rate, two rates will afford PGW the ability to maximize its margin by targeting a different competitive level for each group of customers. The Commission also approved a new interruptible Cogeneration Service (CG) rate. For cogeneration customers with annual usage of less than 1 million Mcf, the rate is set at a fixed margin over the commodity cost of purchased gas. For larger cogeneration customers the margin over the cost of gas would be negotiable.

Also, a new special provision for gas air-conditioning has been incorporated in rates GS, MS, PHA and BPS for separately metered usage during the months of May through September. This provision, which is applicable to new installations with a minimum cooling capacity of 15 tons, offers a lower rate and would provide a benefit to PGW by increasing its system load factor, thereby lowering overall costs to all firm customers.

Lastly, the Commission approved a modification to Rule 10 of the Company's Rules and Regulations. This rule previously allowed up to 100 feet of combination supply main and service supply pipe free of charge to residential customers. The new rule prescribes the effective length of the combination based on a relationship of an amount up to five times the anticipated annual base rate revenue, less the fuel cost component included in the base rates. Under the new rule the customer would pay for any costs in excess of this allowance.

Within the environment of a declining large-industrial sales base, the company has fought hard to maintain its margins and remain competitive with alternate energy sources by employing both traditional as well as the innovative rate forms described above.

To illustrate how PGW's rates compare with those of other gas companies, Stone & Webster calculated typical bills for PGW's residential, commercial and industrial customers and compared these bills with those of other gas companies using identical gas quantities and customer classes (refer to Tables 12, 13 and 14). These tables indicate that PGW's rates are comparable to those of other large urban utilities having a similar high proportion of residential sales.

STATEMENT OF INCOME

We have reviewed Philadelphia Gas Works' forecast of revenues, operating expenses, and annual amounts of internally generated funds and bond funds needed to satisfy its capital improvement program, its debt service, payments to the City of Philadelphia, and working capital requirements. Recognizing current regulatory and economic conditions under which the Company operates, we believe that the Company has developed a reasonable financial plan for fiscal years 1992-1996 and, consequently, we concur with it.

The forecast contemplates two base rate increases over the five-year period as follows:

1992 - \$34,000,000

1995 - \$17,000,000

These base rate increases are net of all cost savings and efficiencies deemed realizable by PGW in the forecast years.

As part of our review of PGW's forecast, we have examined the sensitivity of the plan to changes in net revenues. This is meant as a guide for the reader to estimate the impact of important variables. Net revenue could be impacted by any number of variables including:

- size of rate increases

- timing of rate increases
- sales revenues (weather related)
- actual interest rates
- operating cost savings
- actual receivables

Therefore decreased net revenue resulting from any of the above sources could be offset in whole or in part through additional net revenue resulting from the effect of any of the other above factors.

Regulation - PGW's bond covenant in the General Ordinance requires the debt service coverage ratio to be at least 1.50. In the Company's rate proceeding before the Commission in 1988 all parties agreed that there should be some cushion above the 1.50 level to allow the Company to retain its bond rating. The Company proposed a debt coverage of 2.11, the Public Advocate said a range of 1.7 to 1.9 will achieve this result, and the Philadelphia Gas Commission adopted a ratio of 1.80 as the target, but the coverage ratio for fiscal 1990 actually dropped to 1.51 times. The Company, as it should, has prepared its financial plan under the 1.80 coverage scenario.

1. The Company's financial plan in three of the five forecasted years falls slightly below the targeted 1.8 times debt service coverage, which the Commission previously adopted to provide the minimum cushion necessary for the Company to maintain its bond rating. Therefore, in our first sensitivity test Stone & Webster measured the impact of holding each year's coverage at exactly 1.8. This scenario showed rate increases differing from the Company's plan by approximately 10% over the five year period, while other differences were insignificant.
2. Our second scenario addressed regulation to provide for annual debt service coverage of 1.7. Although the Company's financial plan is still viable under this lower coverage test, its construction fund would be reduced and any additional

setback would necessitate additional or accelerated financing for capital programs due primarily to PGW's reduced ability to fund capital programs with internally generated funds. A reduction of coverage would also put upward pressure on interest rates and again put downward pressure on the Company's bond rating which was recently revised from A to Baa1 by Moody's.

Financial - On May 17, 1991, Moody's Investors Service, Inc., lowered its rating on the Gas Works Revenue Bonds from A to Baa1. Moody's opinion was "The rating revision to Baa1 from A reflects a long term trend of tightened financial operations, reductions in operating flexibility and debt service coverage, and increases in the enterprise's already high debt ratio. While the rate setting commission has indicated its intent to maintain rates at a level sufficient to provide adequate margins in normal operating circumstances, the margins are no longer wide enough to allow the enterprise to address contingencies. In addition, the enterprise no longer has the flexibility to correct its highly leveraged position by providing for a portion of its substantial capital needs from internally generated funds, as had previously been its practice. Despite concerns over these long-term trends, the enterprise's capable management and strong legal covenants assure adequate bondholder security."

The goal of the Company's financial plan is to strengthen and revise upward its current Baa1 rating, maximize internally generated funds and minimize outside financing requirements, reduce operating expenses, reduce working capital requirements, and obtain the highest return on temporary investments and escrow funds. Just as PGW's financial forecast utilizes current regulation in setting rates, it also projects new debt costs using the current cost of similarly rated financings. Our third scenario therefore addressed a significant rise in debt costs, in case actual debt costs prove to be higher in a future bond market.

3. We increased the interest rate by 200 basis points on all projected revenue bond issues. This change increased the cost assigned to those bonds by \$15.5 million

over five years. Debt service coverage averaged 1.68, down from an average of 1.74 in the Company's financial plan.

After analyzing the results of these major scenarios and several minor ones we believe that the Company's financial plan is attainable contingent upon adequate rate relief.

The debt service coverages in the base PGW forecast are detailed on Exhibit V and are summarized in Table 15. Each \$1.0 million of net revenue not achieved would result in a decrease in the coverage ratio by 0.015.

REVENUE BOND FINANCING

We have been informed by PGW that the proceeds from the sale of the Fourteenth and Fifteenth Series Bond issues will be used to:

- Finance PGW's current and future capital programs.
- Establish sinking fund reserves.

It is understood that the bonds will be secured solely by the revenues of PGW received from all Gas System users.

The \$75 million Thirteenth Series Bonds, and the projected \$75 million each of Fourteenth, and Fifteenth Series Bonds to be issued in 1992 and 1995 will be used as shown on Table 16. The application of proceeds from these issues can be summarized as follows:

The \$75 million Thirteenth Series Bonds, and the projected \$75 million each of Fourteenth, and Fifteenth Series Bonds to be issued in 1992 and 1995 will be used as shown on Table 16. The application of proceeds from these issues can be summarized as follows:

	<u>Amount</u> (\$000's)
Total Revenue Bonds Issued for Capital Improvements	\$225,000
Capital Improvement Fund Balance (8/31/90)	28,657
Less Deposits for Sinking Fund Reserve and Issue Expenses	<u>28,995</u>
 Balance Available to PGW as applied 8/31/96	 <u>\$224,662</u>
 Capital Improvement Fund Drawdown	 \$195,505
Capital Improvement Fund Balance (8/31/96)	<u>29,157</u>
 Balance Accounted for (8/31/96)	 <u>\$224,662</u>

The rate covenant in the General Ordinance requires that the City, at a minimum, impose, charge and collect in each Fiscal Year, gas rates and charges equal to the greater of:

A. The sum of:

- (i) All Net Operating Expenses payable during such Fiscal Year;
- (ii) 150% of the amount needed to satisfy sinking fund requirements of principal and interest which will become due and payable during such Fiscal Year for all Bonds issued and outstanding hereunder; and

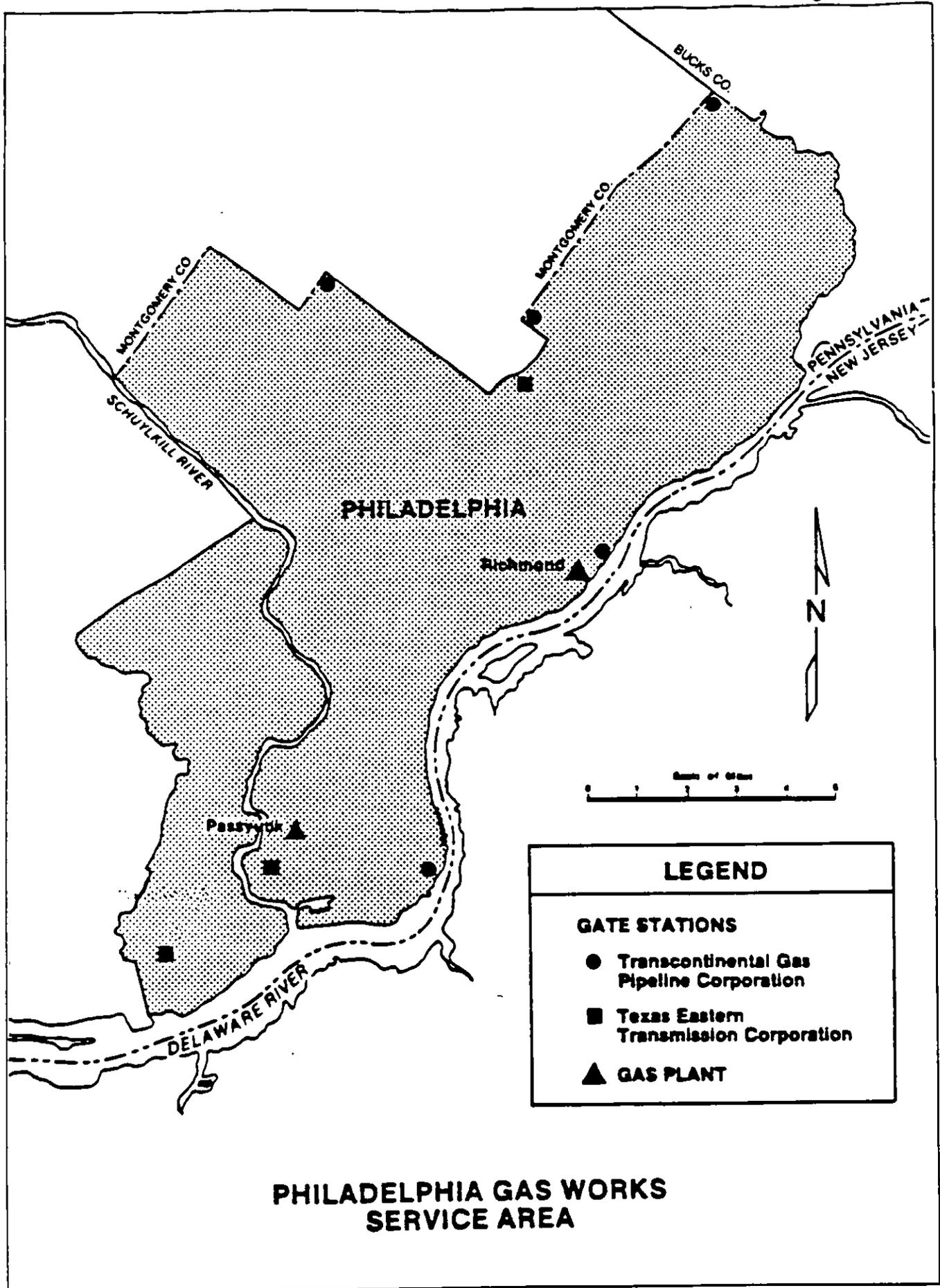
- (iii) The amount, if any, required to be paid into the Sinking Fund Reserve during such Fiscal Year; or

B. The sum of:

- (i) All Net Operating Expenses payable during such Fiscal Year; and
- (ii) All Sinking Fund deposits required during such Fiscal Year with respect to all outstanding Bonds and general obligation bonds issued for improvements to the Gas Works and all amounts, if any, required during such Fiscal Year to be paid into the Sinking Fund Reserve.

The Gas Commission is authorized and directed by the ordinance to impose, charge and collect, or cause to be collected, all rents, rates and charges which shall be sufficient in each Fiscal Year to comply with the foregoing Rate Covenant.

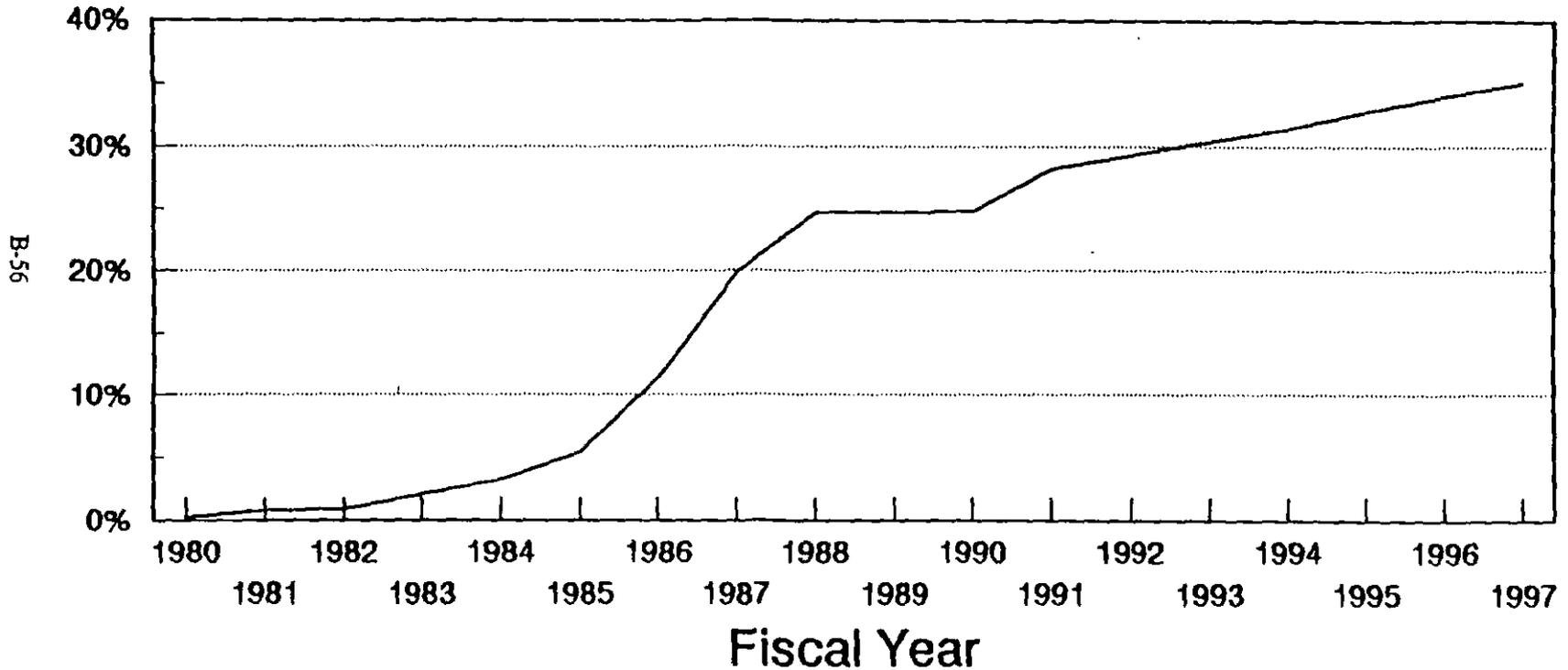
Figure 2



STEAM LOOP CONVERSIONS

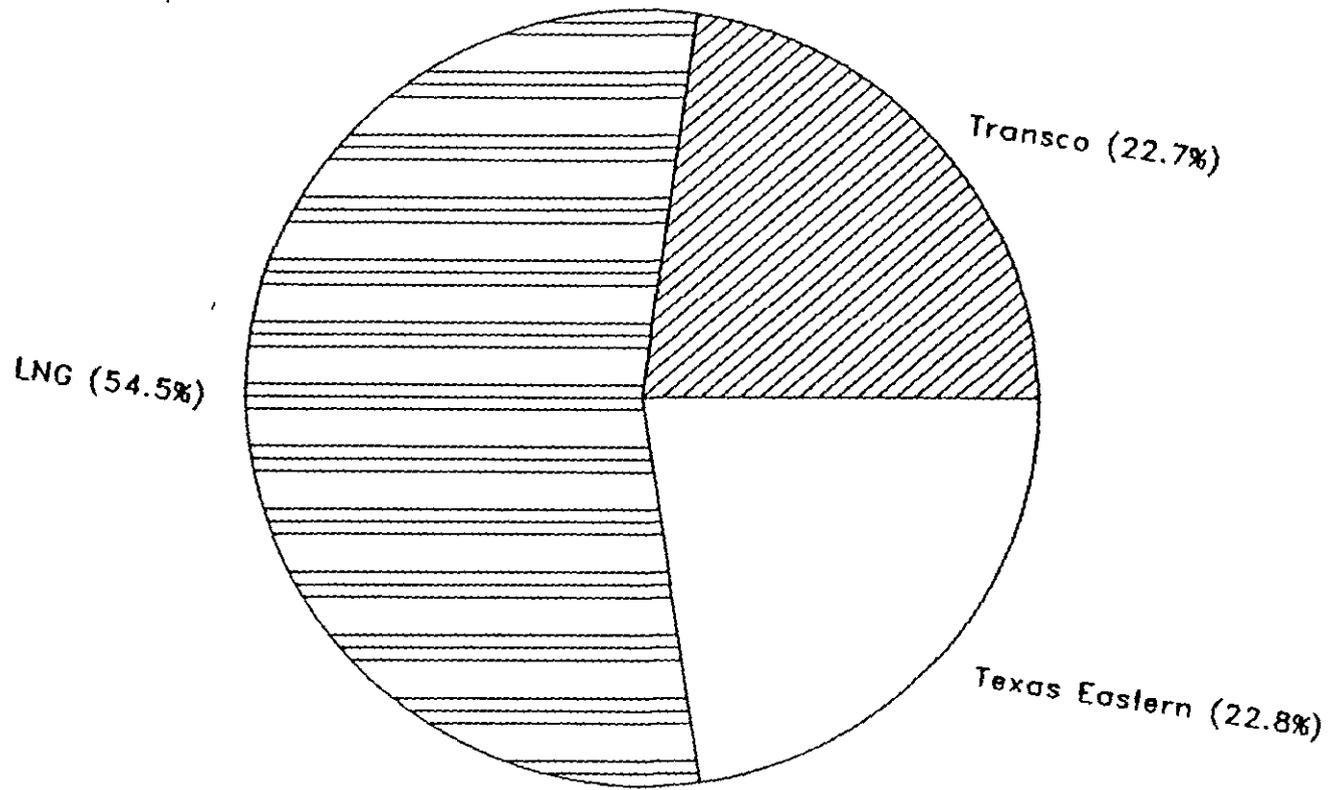
Actual and Projected

Cumulative Percent Converted



Actual: 1980-89
Projected: 1991-97

1992 PEAK DAY AVAILABILITY
BY SOURCE

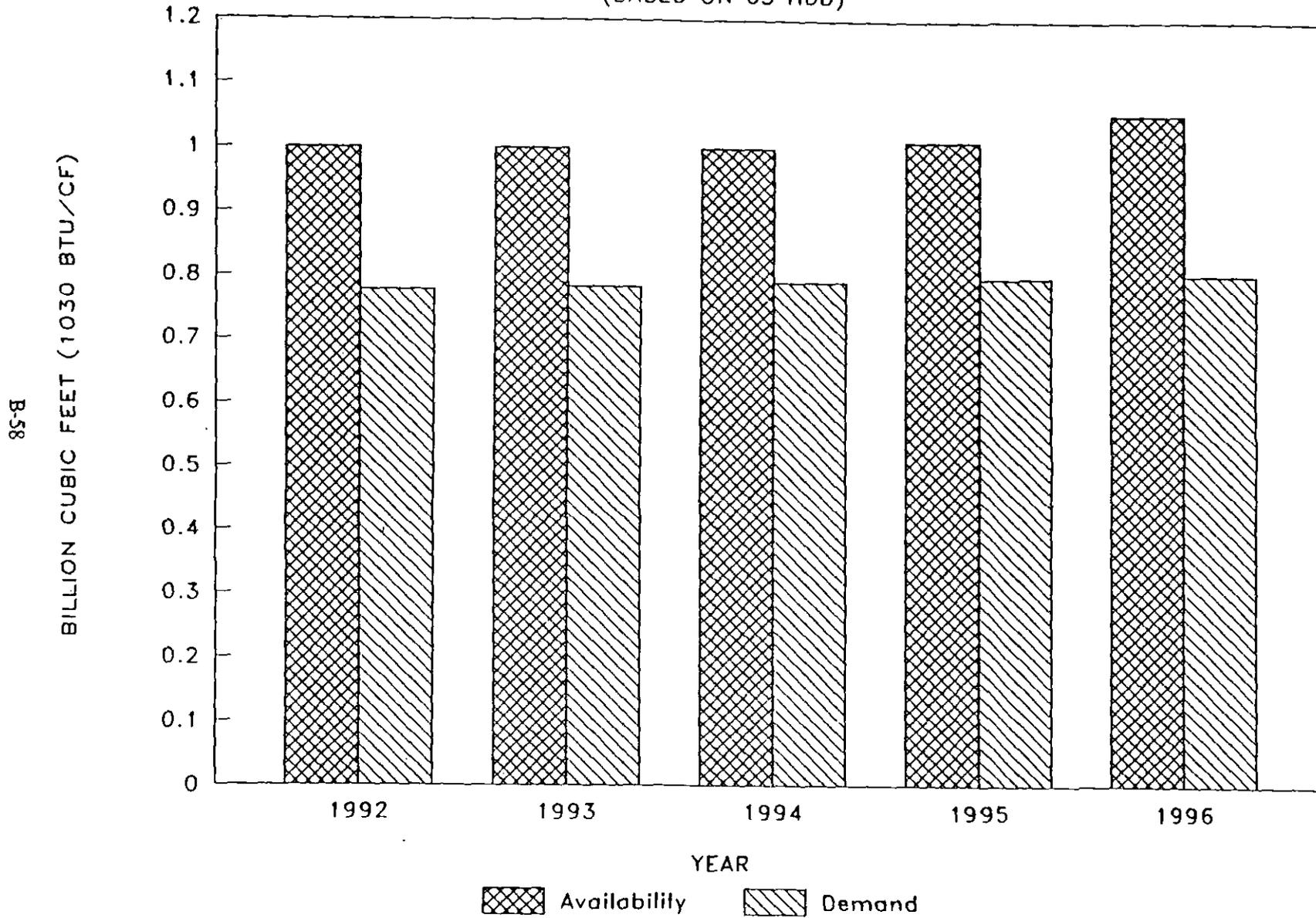


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Figure 4

PEAK DAY DEMAND VS. AVAILABILITY

(BASED ON 65 HDD)



PEAK HOUR DEMAND VS. AVAILABILITY

(BASED ON 70 HDD)

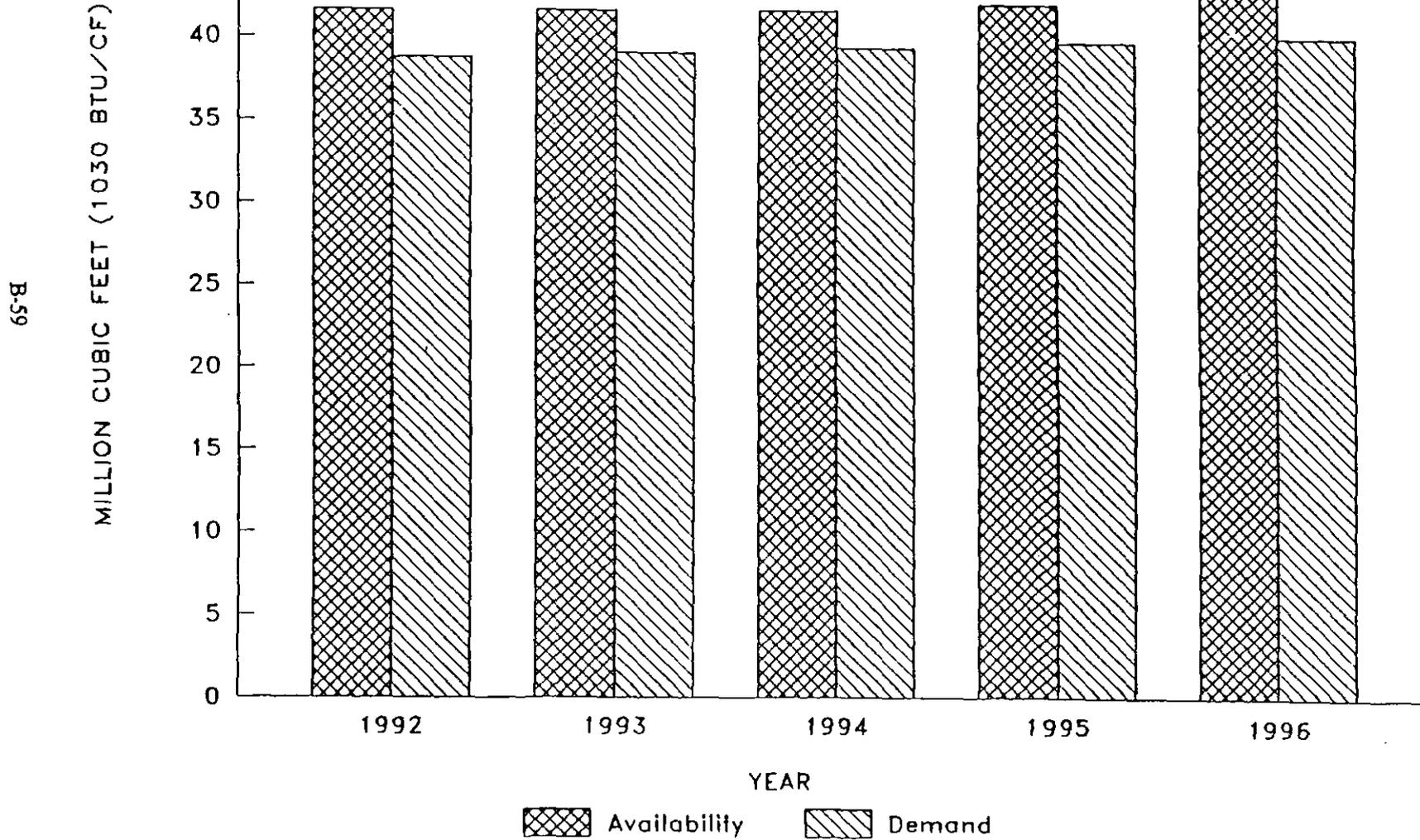


Figure 5B

PGW PROPOSED CAP. IMPROVEMENT PROGRAM

1992 - 1997

Millions of Dollars

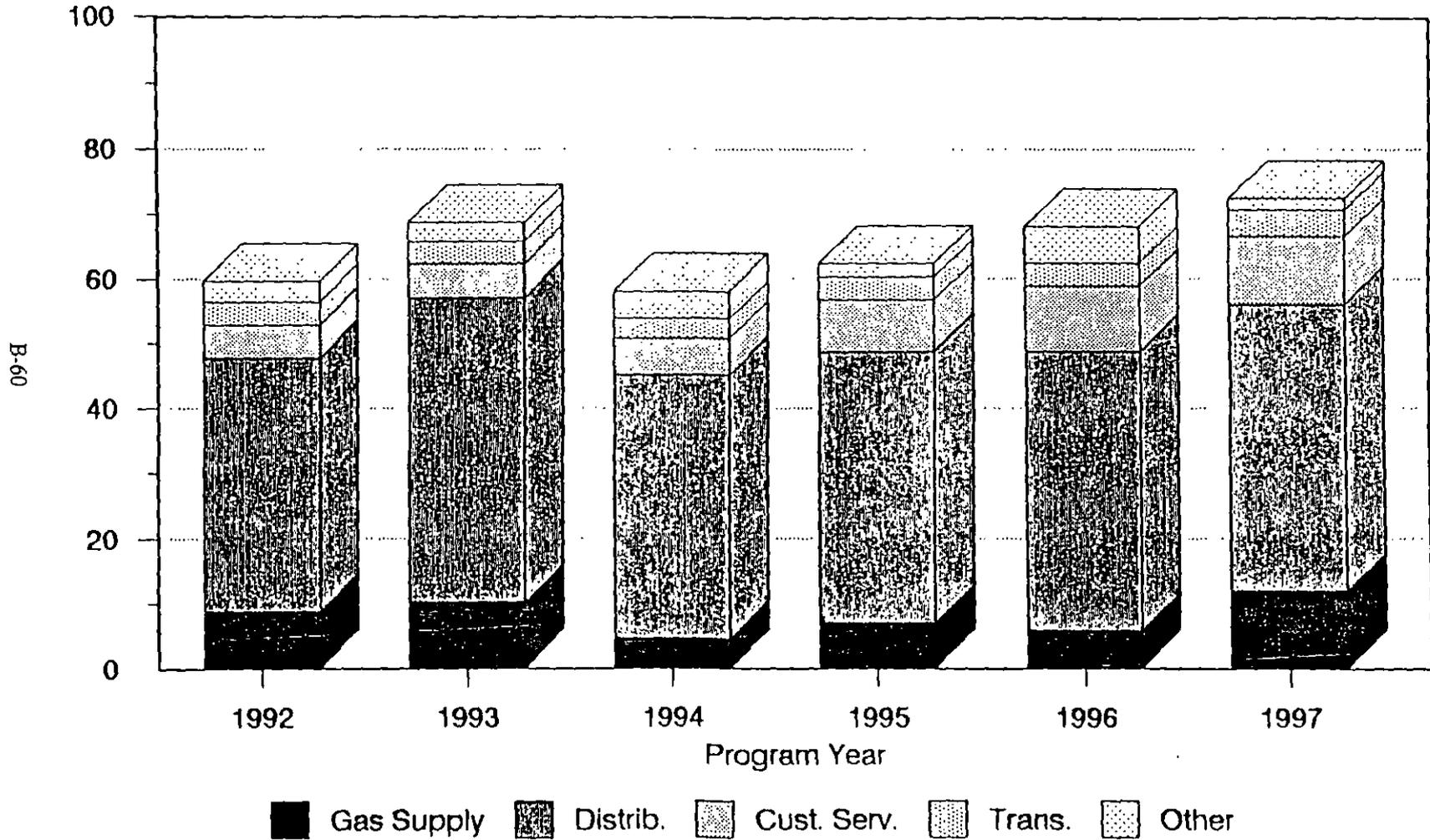
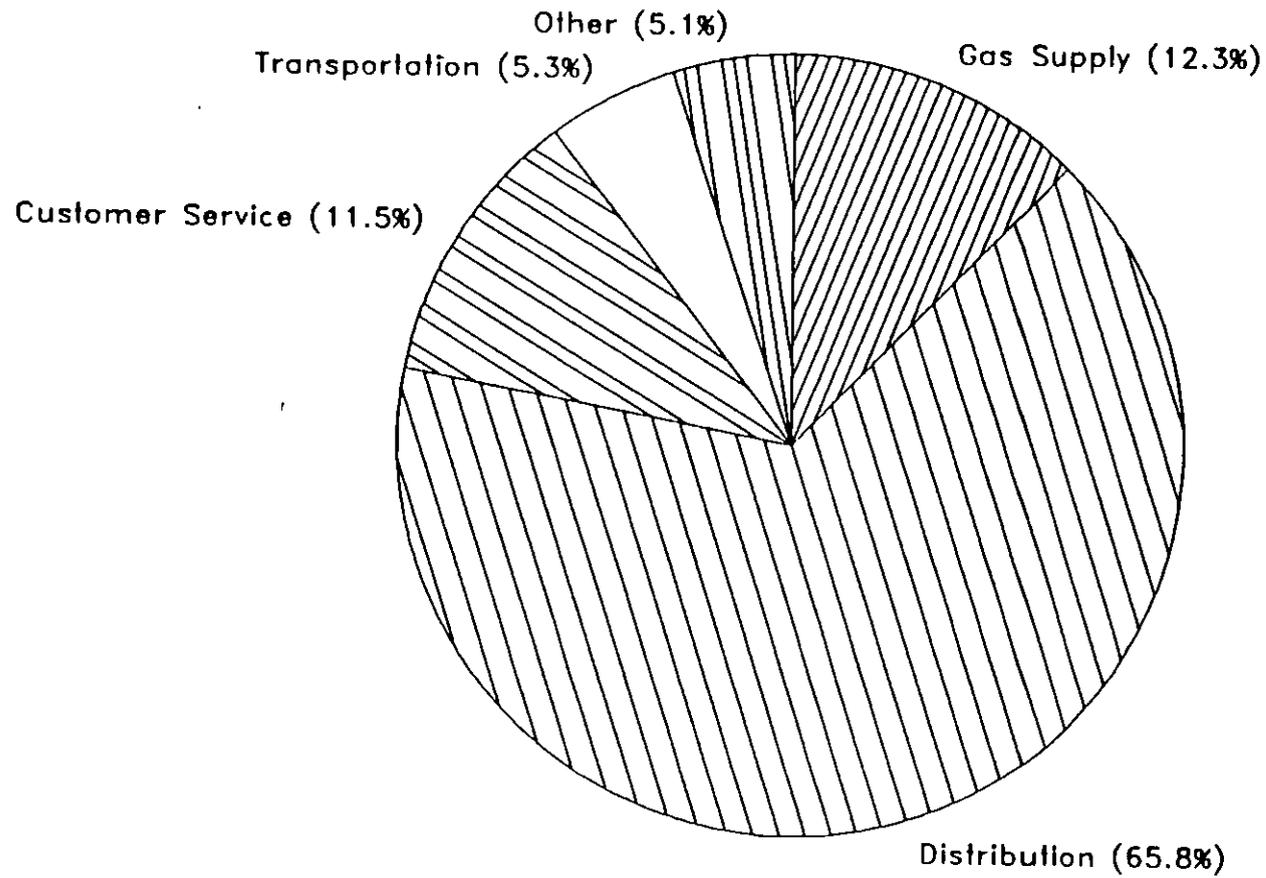


Figure 6

P.G.W. PROPOSED CAPITAL BUDGET

1992 - 1997



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Figure 7

TABLE 1

HISTORICAL NUMBER OF CUSTOMERS

	On August 31,				On June 30,	
	1990	1989	1988	1987	1980	1975
Residential	494,253	497,596	497,228	496,836	516,683	518,929
Commercial & Industrial						
Firm	24,614	20,246	19,507	19,015	20,328	21,997
Interruptible	337	299	264	193	81	288
Municipal & Housing Authority	2	2	2	2	2	2
Total	519,206	518,143	517,001	516,046	537,094	541,216

TABLE 2

HISTORICAL SALES

(MMcf)

	Fiscal Years Ended August 31				Fiscal Years Ended June 30,	
	1990	1989	1988	1987	1980	1975
	----- (MMcf) -----					
Firm	-----					
Residential	47,898	48,730	49,505	48,058	51,520	50,197
Commercial	7,792	7,449	7,127	6,919	6,510	6,103
Industrial	2,334	2,356	2,543	2,480	3,809	4,318
Municipal	1,394	1,442	1,461	1,442	1,641	1,880
Housing Authority	1,971	2,007	2,137	2,077	2,818	2,604
Sales for Resale	96	-	181	-	-	-
	-----	-----	-----	-----	-----	-----
Total Firm	61,485	61,984	62,954	60,976	66,298	65,102
	-----	-----	-----	-----	-----	-----
Interruptible	-----					
Industrial	-	-	-	-	8,211	8,529
Boiler & Power Service	3,251	3,054	2,796	1,910	1,874	1,756
Load Balancing Service	6,987	7,496	9,676	8,452	10,945	-
	-----	-----	-----	-----	-----	-----
Total Interruptible	10,238	10,550	12,472	10,362	21,030	10,285
	-----	-----	-----	-----	-----	-----
Total Sales	71,723	72,534	75,426	71,338	87,328	75,387
	*****	*****	*****	*****	*****	*****
Degree Days (a)	4,431	4,579	4,676	4,498	4,728	4,583

Notes:

(a) PGW's normal heating season (September 15 - May 15) contains 4,600 Degree Days.

TABLE 3

SALES FORECAST (a)

Fiscal Years 1991-1995

	1991	1992	1993	1994	1995
	-----(MMcf)-----				
Firm					

Residential	43,875	48,751	48,895	49,050	49,217
Limited Service	11	12	12	12	12
Commercial	7,747	8,487	8,457	8,439	8,430
Industrial	2,043	2,142	2,125	2,108	2,089
Municipal	1,180	1,449	1,448	1,448	1,448
Housing Authority	1,802	1,967	1,966	1,966	1,966
	-----	-----	-----	-----	-----
Sub-Total	56,658	62,808	62,903	63,023	63,162
Interruptible					

BPS-Direct	228	253	252	252	252
LBS - L Direct	5,516	741	740	740	740
LBS - XL Direct	913	4,900	4,890	4,890	4,890
BPS - Indirect	3,009	2,937	3,128	3,319	3,524
LBS - L Indirect	2,481	1,842	1,842	1,842	1,842
LBS - S Indirect	747	903	947	980	1,024
LBS - XL Indirect	223	934	932	932	932
CO - GEN Indirect	164	372	371	371	371
BPS - A/C	13	98	233	367	539
SALES FOR RESALE	49	0	0	0	0
	-----	-----	-----	-----	-----
Sub-Total	13,343	12,980	13,335	13,693	14,114
	-----	-----	-----	-----	-----
Total	70,001	75,788	76,238	76,716	77,276
	=====	=====	=====	=====	=====
Degree Days	3,997	4,600	4,600	4,600	4,600

Note:

=====

(a) Totals may vary due to rounding.

TABLE 4

CUSTOMER FORECAST

Fiscal Years 1991-1995

	1991	1992	1993	1994	1995
----- (Average Number of Billings) -----					
Residential	503,457	503,074	502,933	502,399	501,964
Philadelphia Housing Authority	5,844	5,844	5,844	5,844	5,844
Commercial	24,040	23,873	23,703	23,562	23,452
Industrial	1,449	1,376	1,339	1,299	1,255
Municipal	699	699	699	699	699
Interruptible	350	352	373	395	421
Total	535,839	535,218	534,891	534,198	533,635

TABLE 5

GROWTH IN SHARE OF RESIDENTIAL MARKET
Fiscal Years 1991 - 1995

	<u>Population(a)</u>	<u>Households(b)</u>	<u>Forecast of(c) Residential Customers</u>	<u>Residential Customers as % of Households</u>
1991	1,584,405	704,180	503,457	71.50%
1992	1,581,237	702,772	503,074	71.58%
1993	1,578,074	701,366	502,933	71.71%
1994	1,574,918	699,964	502,399	71.77%
1995	1,571,768	698,564	501,964	71.86%

Notes:

- a) Represents a 0.2% decline each year in population for Philadelphia County based on 1990 U.S. census actuals.
- b) Assumes 2.25 persons/occupied housing unit from the 1980 census for Philadelphia County.
- c) PGW forecast (Table 4).

TABLE 6

RESIDENTIAL USAGE WITH MARKET SHARE
UNCHANGED FROM 1991 LEVELS (NO GROWTH)
COMPARED WITH PGW'S FORECAST OF GROWTH

	(a)	(a)(d)	(b)	(c)(d)	(d)
	Forecast of Residential Customers	Sales Forecast (MMCF)	Residential Customers at 1991 Level	Sales at 1990 Level (MMCF)	Variance in Load (MMCF)
1991	503,457	43,875	503,457	43,875	0
1992	503,074	48,751	502,481	48,694	(57)
1993	502,933	48,895	501,476	48,753	(142)
1994	502,399	49,050	500,474	48,862	(188)
1995	501,964	49,217	499,473	48,973	(244)
TOTAL					(631)

Notes:

- (a) PGW Forecast.
- (b) Assumes 71.50% of households (see 1991 market share in Table 5) are residential customers.
- (c) Assumes same use per customer as PGW forecast.
- (d) Values may vary due to rounding.

TABLE 7
CURRENT INTERSTATE PIPELINE GAS CONTRACTS

		Contract Quantity		Expiration
		Annual	Daily	Date
		----- (Dth) -----		-----
Flowing Gas Contracts:				

Texas Eastern	CD-2	31,069,980	115,074	11/01/99
	CD-1	14,817,175	40,595	11/01/99
	Kepeco (a)	271,342	743	10/31/91
Transco (b)	PFT (c)	29,200,000	80,000	10/31/04
	LTFT	31,102,380	85,212	03/31/91 (d)
	PS-6	177,030	1,967	10/31/75 (d)
		-----	-----	
Sub-total		106,637,907	323,591	
Storage Contracts:				

Texas Eastern	SS-I	2,647,080	44,118	04/16/01
	SS-II	1,197,000	7,947	04/15/00
	SS-III	2,610,000	26,100	03/31/06
	Equitrans	515,000	4,926	04/01/02
Transco (b)	GSS	4,320,359	61,567	03/31/92
	S-2	466,554	5,193	04/15/74 (d)
	WSS	3,335,909	(e)	03/31/98
	LGA (f)	52,475	10,495	10/31/91
		-----	-----	
Sub-total		15,091,902	149,851	
		-----	-----	
TOTAL		121,729,809	473,442	

NOTES:

- (a) Partial Supply for Equitrans Storage Project.
- (b) Transco Contract Billing Level Adjusted to Available Level at 1035 BTUs per Mcf.
- (c) Firm Transport.
- (d) Extended on a Year-to-year Basis.
- (e) Included in Flowing Gas Contract Quantities.
- (f) Volume not included in totals - Volume Leased to outside company for Peaking Service.

TABLE 8

SUPPLY/DEMAND BALANCE(b)

Fiscal Years 1992 - 1996
 (Normal Year - 4,600 HDD)

	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
	- - - - - (000 Dth) - - - - -				
Demand(a)					
Firm	66,669	66,770	66,897	67,044	67,264
Boiler and Power Service	3,473	3,818	4,162	4,561	4,999
Load Balancing Service	9,685	9,716	9,751	9,797	9,874
Cogeneration	<u>394</u>	<u>393</u>	<u>393</u>	<u>393</u>	<u>394</u>
Total Sales	80,221	80,697	81,203	81,795	82,531
Plant Use	996	1,015	1,014	1,029	1,024
Storage Injection	13,083	14,965	15,014	15,065	15,070
Liquefaction	<u>3,258</u>	<u>3,487</u>	<u>3,486</u>	<u>3,487</u>	<u>3,488</u>
Total Sendout	97,558	100,164	100,717	101,376	102,113
Supplies					
Texas Eastern	27,711	29,929	30,171	30,377	30,717
Transco	51,406	51,767	52,028	52,468	52,827
Storage Withdrawal	14,954	14,982	15,031	15,042	15,087
LNG	3,487	3,486	3,487	3,489	3,482
LPG	0	0	0	0	0
Off-System	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Supplies	97,558	100,164	100,717	101,376	102,113

Note:

- (a) Includes unaccounted for.
 (b) Totals may vary due to rounding.

TABLE 9

SUPPLY/DEMAND BALANCE(b)

Fiscal Years 1992 - 1996
 (Design Year = 5,280 HDD)

	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
	- - - - - (000 Dth) - - - - -				
Demand(a)					
Firm	73,738	73,869	74,019	74,191	74,439
Boiler and Power Service	3,790	4,157	4,522	4,816	5,244
Load Balancing Service	5,980	5,965	5,938	5,951	5,981
Cogeneration	<u>282</u>	<u>282</u>	<u>282</u>	<u>281</u>	<u>279</u>
Total Sales	83,790	84,273	84,761	85,239	85,943
Plant Use	999	1,040	1,041	1,056	1,057
Storage Injection	13,010	14,979	14,965	15,072	15,056
Liquefaction	<u>3,047</u>	<u>3,487</u>	<u>3,486</u>	<u>3,487</u>	<u>3,488</u>
Total Demand	<u>100,846</u>	<u>103,779</u>	<u>104,253</u>	<u>104,854</u>	<u>105,544</u>
Supplies					
Texas Eastern	30,733	32,852	32,957	33,081	33,214
Transco	51,382	51,962	52,103	52,425	52,684
Storage Withdrawal	14,421	14,517	14,694	14,870	15,005
LNG	4,310	4,448	4,499	4,478	4,484
LPG	0	0	0	0	157
Off-System	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Supplies	<u>100,846</u>	<u>103,779</u>	<u>104,253</u>	<u>104,854</u>	<u>105,544</u>

Note:

- (a) Includes unaccounted for.
 (b) Totals may vary due to rounding.

TABLE 10

Peak Day and Peak Hour Capacity

Fiscal Years 1992-1996

(Design Peak Day Weather - 65 HDD)
(Design Peak Hour Weather - 70 HDD)

	1992	1993	1994	1995	1996
	----	----	----	----	----
	----- (MMcf @ 1,030 Btu/cf) -----				
Source of Supply (a)					
Transco					
LTFT	82.7	82.7	82.7	82.7	82.7
PS-6	1.9	1.9	1.9	1.9	1.9
PFT	77.7	77.7	77.7	77.7	77.7
S-2	5.0	5.0	5.0	5.0	5.0
LGA	0.0	0.0	0.0	10.2	10.2
GSS	59.8	59.8	59.8	59.8	59.8
	-----	-----	-----	-----	-----
Total Transco	227.1	227.1	227.1	237.3	237.3
Texas Eastern					
CD-2	111.7	111.7	111.7	111.7	111.7
CD-1	39.4	39.4	39.4	39.4	39.4
SS-I	42.8	42.8	42.8	42.8	42.8
SS-II	6.6	6.6	6.6	6.6	6.6
SS-III	21.8	21.8	21.8	21.8	21.8
Equitrans	5.2	5.2	5.2	5.2	5.2
	-----	-----	-----	-----	-----
Total Texas Eastern	227.5	227.5	227.5	227.5	227.5
Sub-Total	454.6	454.6	454.6	464.8	464.8
Supplemental Gas					
LNG	545.2	545.2	545.2	545.2	545.2
LPG	0	0	0	0	43.6
	-----	-----	-----	-----	-----
Total Supplemental	545.2	545.2	545.2	545.2	588.8
Total Daily Supply	<u>999.8</u>	<u>999.8</u>	<u>999.8</u>	<u>1010.0</u>	<u>1053.6</u>
Average Hourly Supply	41.7	41.7	41.7	42.1	43.9
Firm Peak Day Demand	776.9	782.7	788.9	795.1	801.4
Firm Peak Hour Demand	38.8	39.1	39.4	39.8	40.1

Note:

(a) Daily available volumes after adjustment for
Contract Limitations & Fuel Requirements.

TABLE 11A

PROPOSED CAPITAL IMPROVEMENT PROGRAM

(\$000)

Category	1992	1993	1994	1995	1996	1997	Total	
							\$	%
Gas Supply	\$8,706	\$10,062	\$4,519	\$6,931	\$5,749	\$11,849	\$47,816	12.3%
Distribution	39,094	47,071	40,708	41,832	43,000	44,174	255,879	65.8%
Customer Service	5,178	5,333	5,597	7,999	10,140	10,586	44,833	11.5%
Transportation	3,526	3,385	2,982	3,528	3,457	3,933	20,811	5.3%
Other	3,130	2,838	4,301	2,137	5,626	1,777	19,809	5.1%
	\$59,634	\$68,689	\$58,107	\$62,427	\$67,972	\$72,319	\$389,148	100.0%
Less:								
Reimbursements(a)	(2,301)	(2,396)	(2,494)	(2,597)	(2,704)	(2,814)	(15,306)	-3.9%
Contribution (b)	(142)	(147)	(153)	(159)	(165)	(172)	(938)	-0.2%
Salvage(c)	(261)	(306)	(263)	(283)	(277)	(390)	(1,780)	-0.5%
	\$56,930	\$65,840	\$55,197	\$59,388	\$64,826	\$68,943	\$371,124	-4.6%

Notes:

- (a) Funds available from governmental agencies.
 (b) Customer contributions in aid of construction
 (c) Funds received from sale of scrap metals, used vehicles, equipment, etc.

TABLE 11B

MAJOR CAPITAL BUDGET ITEMS
FISCAL 1992 BUDGET (\$MM)

(COMPARISON OF 1992 ITEMS OVER \$1MM)

CODE	DESCRIPTION	PRIORITY	DEPT.	1992-1991					
				1992 AMOUNT	% OF BUDGET	1991 AMOUNT	% OF BUDGET	AMOUNT DIFFERENCE	PERCENT DIFFERENCE
1 D24 R-1	RENEWAL OF < 1 1/4" SERVICES	1	DIST	\$13.7	22.9%	\$13.2	20.4%	\$0.5	3.4%
1 D21 R-2	PRUDENT MAIN REPLACEMENTS	1	DIST	\$6.8	11.4%	\$6.4	9.9%	\$0.4	6.6%
1 D21 R-1	ENFORCED RELOCATIONS, PRESSURE	1	DIST	\$5.5	9.1%	\$5.4	8.3%	\$0.1	1.2%
1 D22 R-1	ENFORCED RELOCATIONS	1	DIST	\$3.0	5.0%	\$3.2	4.9%	(\$0.2)	-5.1%
2 D24 A-1	INSTAL OF NEW 1-1 1/4" SERVICES	2	DIST	\$2.4	4.1%	\$3.7	5.7%	(\$1.2)	-50.7%
2 D24 A-2	INSTAL OF NEW 2" SERVICES	2	DIST	\$1.3	2.2%	\$1.1	1.8%	\$0.2	15.1%
2 D99 D-99	REMOVAL & ABANDONMENTS	2	DIST	\$1.2	2.0%	\$1.5	2.3%	(\$0.3)	-23.8%
2 D21 A-1	LOCAL MAINS - NEW HOUSES	2	DIST	\$1.2	2.0%	\$1.6	2.4%	(\$0.4)	-34.0%
	SUBTOTAL DIST.			\$35.1	58.9%	\$36.0	55.7%	(\$0.9)	-2.6%
1 C30 R-1	REPL OF WORN METERS	1	CSD	\$2.7	4.5%	\$3.0	4.6%	(\$0.3)	-10.5%
2 C30 A-1	NEW CUSTOMER METERS	2	CSD	\$2.0	3.4%	\$1.9	2.9%	\$0.2	8.0%
	SUBTOTAL CSD			\$4.7	7.9%	\$4.8	7.5%	(\$0.1)	-2.6%
1 GS-2	REPLACE UV FIRE-RICHMOND	1	GS	\$1.0	1.7%	\$0.6	0.9%	\$0.5	44.5%
1-T-T-R-1	REPLACEMENT OF MOTOR VEH'S	1	TRAN	\$2.8	4.7%	\$2.3	3.5%	\$0.5	19.2%
	TOTAL MAJOR PROJECTS			\$43.7	73.2%	\$43.7	67.6%	(\$0.0)	-0.1%
	TOTAL ALL PROJECTS			\$59.6	100.0%	\$64.7	100.0%	(\$5.0)	-8.4%

TABLE 12

TYPICAL RESIDENTIAL MONTHLY BILL COMPARISON⁽¹⁾
(BASED ON 100 THERMS AS OF DECEMBER 31, 1990)

<u>Bill Rank</u>	<u>Company</u>	<u>Typical Monthly Bill (\$)</u>
1.	Bay State Gas Company, MA	118.56
2.	Brooklyn Union Gas Company	90.98
3.	Boston Gas Company	82.57
4.	Consolidated Edison of New York, Inc.	77.86
5.	Washington Gas Light Company, DC	75.51
6.	Elizabethtown Gas Company, NJ	73.60
7.	New Jersey Natural	72.72
8.	Philadelphia Electric Company	70.38
9.	National Fuel Gas, NY	69.71
10.	PHILADELPHIA GAS WORKS	69.00
11.	UGI Corporation, PA	68.41
12.	South Jersey Gas, NJ	66.17
13.	Public Service Electric & Gas, NJ	63.94
14.	Peoples Natural Gas Company, PA	63.12
15.	Niagara Mohawk Power Corp., NY	61.09
16.	Long Island Lighting Company, NY	60.17
17.	Rochester Gas & Electric, NY	59.00
18.	Columbia Gas of Pennsylvania	58.64
19.	Baltimore Gas & Electric Company	57.93

Note:

- (1) Comparison of utilities in the region surrounding Philadelphia Gas Works having annual revenues from gas sales in excess of \$200 million.

Source: American Gas Association.

TABLE 13

TYPICAL COMMERCIAL MONTHLY BILL COMPARISON⁽¹⁾
(BASED ON 300 THERMS AS OF DECEMBER 31, 1990)

<u>Bill Rank</u>	<u>Company</u>	<u>Typical Monthly Bill (\$)</u>
1.	Boston Gas Company	285.00
2.	Brooklyn Union Gas Company	285.00
3.	Bay State Gas Company, MA	229.00
4.	PHILADELPHIA GAS WORKS	210.00
5.	Elizabethtown Gas Company, NJ	217.00
6.	UGI Corporation, PA	217.00
7.	New Jersey Natural	213.00
8.	Philadelphia Electric Company	206.00
9.	National Fuel Gas, NY	201.00
10.	Consolidated Edison of New York, Inc.	196.00
11.	Peoples Natural Gas Company, PA	194.00
12.	Public Service Electric & Gas, NJ	189.00
13.	South Jersey Gas, NJ	184.00
14.	Long Island Lighting Company, NY	183.00
15.	Niagara Mohawk Power Corp., NY	182.00
16.	Rochester Gas & Electric, NY	170.00
17.	Columbia Gas of Pennsylvania	163.00
18.	Baltimore Gas & Electric Company	158.00
19.	Washington Gas Light Company, DC	140.00

Note:

- (1) Comparison of utilities in the region surrounding Philadelphia Gas Works having annual revenues from gas sales in excess of \$200 million.

Source: American Gas Association.

TABLE 14

TYPICAL INDUSTRIAL MONTHLY BILL COMPARISON⁽¹⁾
 (BASED ON 1,000 THERMS AS OF DECEMBER 31, 1990)

<u>Bill Rank</u>	<u>Company</u>	<u>Typical Monthly Bill (\$)</u>
1.	Niagara Mohawk Power Corp., NY	3,803.00 ⁽²⁾
2.	Peoples Natural Gas Company, PA	961.00
3.	Brooklyn Union Gas Company	875.00
4.	Boston Gas Company	822.00
5.	Washington Gas Light Company, DC	701.00
6.	UGI Corporation, PA	682.00
7.	PHILADELPHIA GAS WORKS	680.00
8.	New Jersey Natural	672.00
9.	Bay State Gas Company, MA	669.00
10.	Elizabethtown Gas Company, NJ	643.00
11.	National Fuel Gas, NY	625.00
12.	Public Service Electric & Gas, NJ	615.00
13.	Consolidated Edison of New York, Inc.	599.00
14.	Long Island Lighting Company, NY	596.00
15.	South Jersey Gas, NJ	567.00
16.	Rochester Gas & Electric, NY	554.00
17.	Columbia Gas of Pennsylvania	526.00
18.	Baltimore Gas & Electric Company	496.00
	Philadelphia Electric Company	-(3)

Notes:

- (1) Comparison of utilities in the region surrounding Philadelphia Gas Works having annual revenues from gas sales in excess of \$200 million.
 Source: American Gas Association.
- (2) Minimum bill provision results in high monthly bill for 1,000 therm consumption level.
- (3) Utility not reporting for the period.

Table 15

Coverage of Debt Service From Operations

Fiscal Year -----	Revenue Bonds -----
1990 Actual	1.51 x
1991 Projected	1.51 x
1992 Projected	1.80 x
1993 Projected	1.73 x
1994 Projected	1.66 x
1995 Projected	1.80 x
1996 Projected	1.73 x

TABLE 16

SOURCES AND USES OF CASH FOR CAPITAL IMPROVEMENT EXPENDITURES

Fiscal Years 1987 Through 1996
(\$000)

	ACTUAL				PROJECTED					
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Sources:										
Bond Proceeds @ Par	\$100,000	-	-	\$75,000	\$75,000	\$75,000	-	-	\$75,000	-
Proceeds from Sale/Lesseback	-	-	25,000	-	-	-	-	-	-	-
PGW Internal Funds	21,106	19,437	8,159	17,250	0	22,011	36,032	29,969	38,042	36,951
Total Sources	\$121,106	\$19,437	\$33,159	\$92,250	\$75,000	\$97,011	\$36,032	\$29,969	\$113,042	\$36,951
	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Uses:										
Changes in Capital Improvement Fund	\$52,286	(\$53,100)	(\$27,318)	\$24,011	\$4,530	\$29,935	(\$25,700)	(\$29,100)	\$46,635	(\$25,800)
Discount & Issuance Expense	1,989	-	1,107	4,006	2,625	2,625	-	-	2,625	-
Deposit to Sinking Fund	8,725	-	2,247	6,035	7,040	7,040	-	-	7,040	-
Capital Expenditures	58,106	72,537	57,123	58,198	60,805	57,411	61,732	59,069	56,742	62,751
Total Uses	\$121,106	\$19,437	\$33,159	\$92,250	\$75,000	\$97,011	\$36,032	\$29,969	\$113,042	\$36,951
	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Capital Improvement Fund:										
Deposit	\$89,286	\$0	\$21,646	\$64,959	\$65,335	\$65,335	\$0	\$0	\$65,335	\$0
Drawdown	37,000	53,100	48,964	40,948	60,805	35,400	25,700	29,100	18,700	25,800
Changes in Fund	\$52,286	(\$53,100)	(\$27,318)	\$24,011	\$4,530	\$29,935	(\$25,700)	(\$29,100)	\$46,635	(\$25,800)
Balance End of Period	\$85,064	\$31,964	\$4,646	\$28,657	\$33,187	\$63,122	\$37,422	\$8,322	\$54,957	\$29,157
	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

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TABLE 17

ACCOUNTS RECEIVABLE, RESERVE FOR UNCOLLECTIBLES, WRITE-OFF
EXPENSES, DELINQUENT CUSTOMERS, AND REVENUE STATISTICS

(\$000)

	Twelve Months at August 31				
	1986	1987	1988	1989	1990
	-----	-----	-----	-----	-----
Billed Gas Revenues	\$473,703	\$452,432	\$462,226	\$469,569	\$470,110
Accounts Receivable	92,061	94,441	83,734	87,994	91,215
Reserve for Uncollectible Accounts	39,358	41,639	40,851	39,181	41,053
Reserve as a Percentage of Accounts Receivable	42.8%	44.1%	48.8%	44.5%	45.0%
Write-off Expenses	13,159	20,496	20,874	20,920	22,137
Receivables as a Percentage of Sales Revenue	19.4%	20.9%	18.1%	18.7%	19.4%
Delinquent Customers (Annual Average)	153,086	156,387	148,588	141,095	133,610

TABLE 18

FORECAST OF CUSTOMER
ACCOUNTS RECEIVABLE, RESERVE FOR UNCOLLECTIBLE ACCOUNTS
AND WRITE-OFF EXPENSES

(\$000)

	F I S C A L Y E A R S					
	1991	1992	1993	1994	1995	1996
	----	----	----	----	----	----
Billed Gas Revenues (a)	\$442,115	\$545,092	\$553,430	\$568,978	\$602,979	\$620,556
Accounts Receivable	89,217	111,113	109,998	110,484	115,122	116,904
Reserve for Uncollectible Accounts	40,975	49,448	48,573	48,232	49,572	49,921
Reserve as a Percentage of Accounts Receivable	45.9%	44.5%	44.2%	43.7%	43.1%	42.7%
Write-off Expenses	25,062	28,592	31,592	32,092	32,492	32,592
Receivables as a Percentage of Sales Revenue	20.2%	20.4%	19.9%	19.4%	19.1%	18.8%

Notes:

- (a) 1992 Fiscal Year includes an increase in base rates of \$34.0 million.
The 1995 Fiscal Year includes an increase in base rates of an additional \$17.0 million.

EXHIBIT I

PHILADELPHIA GAS WORKS
SELECTED OPERATING STATISTICS

Fiscal Data	Years Ended June 30			Years Ended August 31						
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Number of Customers	532,298	528,189	518,393	518,869	518,997	518,614	516,046	517,001	518,143	519,206
Miles of Distribution Mains	2,983	2,986	2,981	2,983	2,986	2,989	2,993	3,018	3,031	3,014
Utility Plant (\$000) (1)	498,694	527,301	557,241	586,752	624,835	667,339	720,506	787,601	840,248	892,970
Total Gas Sales (MMcf)	87,115	83,690	72,537	78,269	69,851	71,857	71,338	75,426	72,534	71,723
Operating Revenues (\$000):										
Heating	288,603	356,673	363,737	394,586	373,937	367,716	363,057	372,007	379,673	376,006
Non-heating	130,509	130,837	130,220	130,842	115,482	103,476	87,461	93,115	87,607	90,245
Total Operating Revenues	425,877	495,296	502,305	532,163	495,286	477,127	456,443	469,567	472,706	472,172
Other Income	14,297	11,531	13,381	16,729	15,906	15,643	12,295	15,940	12,858	11,880
Operating Expenses (\$000):										
Natural Gas	246,723	272,004	298,237	305,835	289,383	266,029	221,119	229,284	238,087	230,362
Gas Processing	59,263	37,783	22,700	16,886	17,104	19,729	20,713	24,611	24,410	25,390
Customer Service	16,945	17,905	17,525	18,182	19,455	20,306	20,858	20,786	20,382	19,229
Distribution	9,182	10,497	11,212	12,335	13,048	13,411	14,350	16,562	16,244	20,588
Collection & Meter Reading (2)	21,911	38,191	36,888	36,680	34,673	32,132	36,215	35,010	32,383	37,241
Administrative and General	13,231	18,134	18,783	18,692	19,523	25,068	26,112	28,413	27,185	26,989
Other Operating Expenses (3)	39,366	43,535	47,785	49,649	51,405	52,731	57,267	60,745	60,612	56,676
Total Operating Expenses	406,621	438,049	453,130	458,259	444,591	429,406	396,634	415,411	419,303	416,475
Interest Expense	29,564	35,065	38,699	39,843	40,766	44,244	44,125	48,575	47,736	49,007
Net Income	3,989	33,713	23,857	50,790	17,347(4)	19,120	27,979	21,521	18,525	18,570

- 1) Gross Plant at original cost.
- 2) Includes appropriation to Reserve for Uncollectible Accounts.
- 3) Includes Customer Relations, Customer Accounting, Marketing, Pensions, Taxes and Net Depreciation and Amortization.
- 4) Includes extraordinary loss of \$8,488,000 due to early extinguishment of debt.

EXHIBIT II

PHILADELPHIA GAS WORKS
FORECAST STATEMENT OF INCOME

Fiscal Years 1990 through 1996
(\$000)

	ACTUAL 1990 -----	FORECAST					
		1991 -----	1992 -----	1993 -----	1994 -----	1995 -----	1996 -----
Operating Revenues							
Sales (Current Rates & Changes to GCR)	\$466,101	\$454,069	\$507,765	\$519,330	\$535,028	\$552,429	\$569,706
Projected Rate Increase - Prior				34,000	34,000	34,000	51,000
- Current			34,000			17,000	
Other Operating Revenues	6,071	6,152	6,898	6,764	6,848	7,233	7,386
Total Operating Revenues	472,172	460,221	548,663	560,094	575,876	610,662	628,092
Operating Expenses							
Natural Gas	230,362	209,447	236,904	244,369	253,546	265,497	278,064
Other Raw Material	1,037	388	15	18	20	22	25
Gas Processing	24,353	21,693	23,744	24,053	25,060	26,183	27,365
Other Operating & Maintenance (Exhibit III)	141,851	142,847	168,525	167,015	176,166	185,098	191,213
Operating Expenses Excl. Depreciation	397,603	374,375	429,188	435,455	454,792	476,800	496,667
Depreciation	18,872	22,102	22,118	23,485	24,871	25,677	27,087
Total Operating Expenses	416,475	396,477	451,306	458,940	479,663	502,477	523,754
Operating Income	55,697	63,744	97,357	101,154	96,213	108,185	104,338
Other Income	11,880	12,124	12,490	14,280	12,588	11,961	14,375
Income Before Interest	67,577	75,868	109,847	115,434	108,801	120,146	118,713
Interest Expense							
Long-term Debt Interest:							
Revenue Bonds	39,680	43,362	48,105	51,600	49,558	48,341	51,197
PMA Bonds	1,847	1,821	1,794	1,763	1,731	1,696	1,657
Bond Discount & Expenses	1,749	1,997	2,034	2,043	1,942	1,853	1,849
Total Long-term Interest	43,276	47,180	51,933	55,406	53,231	51,890	54,703
Other Interest:							
Short-term Debt	4,366	4,551	3,620	3,620	3,620	3,620	3,620
Loss from Extinguishment of Debt	2,036	2,006	1,918	1,824	1,725	1,619	1,500
Interest on Customer Deposits	385	350	325	325	325	325	325
Miscellaneous		59	11				
Total Other Interest	6,787	6,966	5,874	5,769	5,670	5,564	5,445
UDC	(1,056)	(1,448)	(882)	(636)	(719)	(462)	(636)
Total Interest Expense	49,007	52,698	56,925	60,539	58,182	56,992	59,512
Income	18,570	23,170	52,922	54,895	50,619	63,154	59,201
sent to City of Philadelphia	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Income Transferred to Retained Earnings	\$570	\$5,170	\$34,922	\$36,895	\$32,619	\$45,154	\$41,201

EXHIBIT III

PHILADELPHIA GAS WORKS
FORECAST OTHER OPERATION AND MAINTENANCE EXPENSES

Fiscal Years 1990 through 1996
(\$000)

	FORECAST							TOTAL FORECAST	
	ACTUAL 1990	1991	1992	1993	1994	1995	1996	\$	%
Other Operation and Maintenance Expenses									
Administrative & General	\$26,989	\$29,875	\$36,391	\$37,084	\$40,711	\$43,254	\$46,502	\$233,817	22.7%
Appropriation to Reserve for Uncollectible Accounts	24,137	24,696	37,406	30,552	31,741	33,844	32,932	191,171	18.5%
Customer Service	19,229	19,083	19,656	20,625	21,502	22,315	23,401	126,582	12.3%
Distribution	20,588	18,032	19,404	20,567	21,668	22,740	23,803	126,214	12.2%
Pensions	17,748	16,202	16,884	17,471	17,974	18,398	18,141	105,070	10.2%
Customer Relations	8,448	8,718	9,351	9,781	10,306	10,838	11,282	60,276	5.8%
Collection	7,051	6,997	7,473	7,892	8,306	8,703	9,119	48,490	4.7%
Taxes	6,153	6,349	6,853	7,319	7,794	8,108	8,454	44,877	4.4%
Meter Reading	6,053	6,365	6,685	7,013	7,206	7,371	7,461	42,101	4.1%
Marketing	2,639	3,627	5,269	5,498	5,616	6,002	6,445	32,457	3.1%
Customer Accounting	2,816	2,903	3,153	3,213	3,342	3,525	3,673	19,809	1.9%
Total Other Operation and Maintenance Expenses	\$141,851	\$142,847	\$168,525	\$167,015	\$176,166	\$185,098	\$191,213	\$1,030,864	100.0%

EXHIBIT IV

PHILADELPHIA GAS WORKS
CAPITAL EXPENDITURE SUMMARY

Fiscal Years 1990 through 1996
(\$000)

	Actual 1990	Est/Act 1991	FORECAST				
			1992	1993	1994	1995	1996
Additions and Replacements							
Supply Plant	\$6,337	\$7,563	\$6,203	\$4,008	\$8,098	\$6,486	\$5,792
Distribution Plant	38,019	37,982	32,722	43,068	38,703	35,801	39,332
Customer Service	4,067	4,600	7,711	9,946	5,446	7,776	9,896
Other	7,940	8,258	11,026	4,597	6,595	6,490	7,408
Sub-total	56,363	58,403	57,662	61,619	58,842	56,553	62,428
Less: Contributions in Aid of Construction	1,299	1,236	2,887	2,987	3,011	2,741	2,854
Net Additions and Replacements	55,064	57,167	54,775	58,632	55,831	53,812	59,574
Allowance for Funds Used During Construction							
Supply Plant	315	217	172	244	233	168	186
Distribution, Customer Service and other Plant	1,184	1,231	1,258	1,284	1,226	1,235	1,362
Sub-total	1,499	1,448	1,430	1,528	1,459	1,403	1,548
Removal Costs (Net)							
Removal Cost	1,758	2,255	1,471	1,874	2,053	1,815	1,909
Salvage	(123)	(65)	(265)	(302)	(274)	(288)	(280)
Sub-total	1,635	2,190	1,206	1,572	1,779	1,527	1,629
TOTAL	<u>\$58,198</u>	<u>\$60,805</u>	<u>\$57,411</u>	<u>\$61,732</u>	<u>\$59,069</u>	<u>\$56,742</u>	<u>\$62,751</u>

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EXHIBIT V

PHILADELPHIA GAS WORKS
ANALYSIS OF INTERNALLY GENERATED FUNDS
AVAILABLE TO COVER DEBT SERVICE

Fiscal Years 1990 through 1996
(\$000)

	ACTUAL 1990	FORECAST					
		1991	1992	1993	1994	1995	1996
Funds Provided:							
Operating Revenues (Exhibit II)	\$472,172	\$460,221	\$548,663	\$560,094	\$575,876	\$610,662	\$628,092
Other Income	13,394	12,752	12,329	14,109	12,406	11,768	14,170
AFLDC	1,056	1,448	882	636	719	462	636
Total Funds Provided	486,622	474,421	561,874	574,839	589,001	622,892	642,898
Funds Applied to Operations:							
Operation Expenses Excluding Depreciation (Exhibit II)	397,603	374,375	429,188	435,455	454,792	476,800	496,667
Less: Expenses Not Requiring Expenditure of Funds	5,397	4,545	4,201	4,064	4,638	4,573	5,032
Total Funds Applied	392,206	369,830	424,987	431,391	450,154	472,227	491,635
Internally Generated Funds Available for Debt Service	94,416	104,591	136,887	143,448	138,847	150,665	151,263
Less: PMA Bond Debt Service	1,625	2,245	2,243	2,244	2,242	2,243	2,246
Internally Generated Funds Available to Cover Revenue Bond Debt Service	92,791	102,346	134,644	141,204	136,605	148,422	149,017
Funds Applied to Debt Service:							
Revenue Bonds - Proposed			6,375	13,415	14,078	14,075	20,448
- Existing	61,654	67,798	68,475	68,436	68,427	68,403	65,698
Total Revenue Bonds	61,654	67,798	74,850	81,851	82,505	82,478	86,146
Temporary Financing	4,361	4,612	3,620	3,620	3,620	3,620	3,620
Total Funds Applied to Debt Service	66,015	72,410	78,470	85,471	86,125	86,098	89,766
Internally Generated Funds Available for City Fee Payment to City - City Fee	26,776	29,936	56,174	55,733	50,480	62,324	59,251
Internally Generated Funds Available	\$8,776	\$11,936	\$38,174	\$37,733	\$32,480	\$44,324	\$41,251
Debt Service Coverage Revenue Bonds	1.51	1.51	1.80	1.73	1.66	1.80	1.73

EXHIBIT VI

PHILADELPHIA GAS WORKS

ANALYSIS OF CASH AND ANNUAL CASH BALANCES

Fiscal Years 1990 through 1996
(\$000)

	ACTUAL 1990	F O R E C A S T					1996
		1991	1992	1993	1994	1995	
Beginning Cash Balance	\$87,797	\$24,598	\$3,604	\$11,342	\$11,126	\$10,706	\$10,846
Sources of Funds:							
Internally Generated							
Net Income (Exhibit II)	18,570	23,170	52,922	54,895	50,619	63,154	59,201
Items in Net Income Not Requiring Funds	22,155	25,463	25,441	26,994	28,587	29,663	31,134
Interest Expenses Included in Net Income (Exhibit II)	49,007	52,698	56,925	60,539	58,182	56,992	59,512
Total Internal Funds	89,732	101,331	135,288	142,428	137,388	149,809	149,847
Externally Generated:							
Revenue Bond Proceeds	64,959	65,335	65,335			65,335	
Capital Improvement Fund Drawdown	40,948	60,805	35,400	25,700	29,100	18,700	25,800
Temporary Borrowings							
Total External Funds	105,907	126,140	100,735	25,700	29,100	84,035	25,800
Total Sources of Funds	283,436	252,069	239,627	179,470	177,614	244,550	186,493
Uses of Funds:							
Debt Service Coverage (Exhibit V)	66,015	72,410	78,470	85,471	86,125	86,098	89,766
MA Bond Debt Service (Exhibit V)	1,625	2,245	2,243	2,244	2,242	2,243	2,246
Working Capital Increases	(10,959)	18,170	6,826	897	1,472	5,286	2,385
Construction Requirements (Exhibit IV)	58,198	60,805	57,411	61,732	59,069	56,742	62,751
Payment to City of Phila. - Fee (Exhibit II)	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Deposit of Capital Improvement Fund (Table 16)	64,959	65,335	65,335	0	0	65,335	0
Payment of Temporary Borrowings	61,000	11,500					
Total Uses of Funds	258,838	248,465	228,285	168,344	166,908	233,704	175,148
Ending Cash Balance	\$24,598	\$3,604	\$11,342	\$11,126	\$10,706	\$10,846	\$11,345

APPENDIX

A NOTE ON SALES/SUPPLY/DEMAND UNITS

Sales/supply/demand in this report are reported in volume or energy units. PGW purchases gas in energy units but, usually sells them in volume units because that is what gas meters measure. There is a fundamental relationship between them used for reporting purposes - one cubic foot of gas (volume) equals approximately 1,030 Btu (energy). More complex measures evolve from this relationship as follows:

Energy Units

Btu	-	British thermal unit - the amount of energy required to raise the temperature of one pound of water by one degree Fahrenheit
Therm	-	100,000 Btu
Dekatherm	-	10 Therms (1,000,000 Btu)

Volume Units

Scf	-	Standard cubic foot - the amount of gas contained in one cubic foot at 60°F and standard pressure of 14.73 pounds per square inch absolute (normal atmospheric pressure)
Mcf	-	Thousand cubic feet, 1,000 Scf
MMcf	-	Million cubic feet, 1,000 Mcf (1,000,000 Scf)
Bcf	-	Billion cubic feet, 1,000 MMcf (1,000,000,000 Scf)

For the reader's ease in reading/understanding the report the following approximations may be useful:

- One Dekatherm equals one Mcf,
- One thousand Dekatherms equals one MMcf.

APPENDIX C
Summaries of Legislation
Authorizing the Issuance
of Gas Works Revenue Bonds

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The following are summaries of certain provisions of The First Class City Revenue Bond Act (the "Act") and the General Gas Works Revenue Bond Ordinance of 1975, as amended (the "General Ordinance"), which authorize the issuance of Gas Works Revenue Bonds generally and the Thirteenth Supplemental Gas Works Bond Ordinance (the "Thirteenth Supplemental Ordinance") which authorizes the issuance of the Thirteenth Series Bonds. The summaries are not, and should not be regarded as complete statements of the provisions of this legislation or of the portions thereof summarized. Reference is made to the Act, the General Ordinance and the Thirteenth Supplemental Ordinance, copies of which are available from the Office of the Director of Finance, Room 1420, Municipal Services Building, Philadelphia, Pennsylvania 19102, for the complete terms and provisions thereof. Certain terms used in this summary are defined below. Other terms used herein are defined in the Act, the General Ordinance and the Thirteenth Supplemental Ordinance and, unless otherwise stated, shall have the meanings set forth therein.

THE FIRST CLASS CITY REVENUE BOND ACT

(Act 234 of the General Assembly of the Commonwealth)
approved October 18, 1972, P.L. 955; 53 P.S:§§15901-24)

General Authorization; Definitions; Bonds to be Special Obligations

The Act is intended to provide a comprehensive authorization to the City of Philadelphia (the "City") and any other Pennsylvania city of the first class to issue revenue bonds ("Bonds") to finance various types of projects and to issue Bonds to refund previously issued Bonds and certain other bonds, as more fully described herein under "Refunding."

"Project" is defined to include, inter alia, any building, structure, facility or improvement of a public nature, the related land and rights or leasehold estates therein and the related furnishings, machinery, apparatus or equipment of a capital nature, which the City is authorized to own, construct, acquire, improve, lease, operate, maintain or support; any item of construction, acquisition or extraordinary maintenance or repair thereof; the City's share of the cost of any of the foregoing undertaken jointly with others; and any combination of the foregoing or any undivided portion of the cost of any of the foregoing as may be designated a "project" by the City for financing purposes and in respect of which the City may reasonably be expected to receive Project Revenues.

"Project Revenues" mean, in respect of a Project, all rents, rates, tolls or charges imposed or charged for the use or product of, or services generated from the Project to the

ultimate users or customers thereof, all payments under bulk contracts with municipalities, government instrumentalities or other bulk users, all subsidies or payments payable by federal, state or local governments or governmental agencies on account of the cost of operation of the Project, or the payment of the principal of or interest on moneys borrowed to finance the cost of the Project, and may include reasonable estimates of all interest on and profits from investment of moneys derived from the foregoing.

Bonds issued under the Act are required to be payable solely from Project Revenues and to be secured solely by such revenues and by any reserve funds which may be created or funded in connection with the Bonds. The Bonds are not permitted to pledge the credit or taxing power of the City, to create a debt or charge against the tax or general revenues of the City, or to create a lien against any City property other than the Project Revenues pledged therefor and the reserve funds established in respect of the Bonds. The amount of the Bonds does not constitute a debt of the City, and is excluded from the calculation of the City's debt-incurring capacity under the Pennsylvania Constitution.

Estimate of Future Revenues

In order to establish that Project Revenues will be sufficient to amortize all Bonds outstanding, the Act requires a finding to be made in the ordinance authorizing the issuance of the Bonds that the pledged Project Revenues will be sufficient to pay any prior parity charges on such pledged Project Revenues and the principal of and interest on the Bonds. This finding is to be based on a report of the chief fiscal officer of the City filed with the City Council and supported by appropriate schedules and summaries. The report of the chief fiscal officer of the City may be based on the final report of the head of the department or agency of the City having jurisdiction over the project involve or on a certificate of registered engineers engaged by the City to compile relevant data.

For the purpose of estimating future Project Revenues, the Act provides that only the following shall be included: (i) those rents, rates, tolls or charges to the general public which, under existing authorizations, are or will be in effect and will be reasonably collectible during the fiscal year under the rate schedule which is or will be in effect during such fiscal year, or which may be imposed by administrative action without future legislation; (ii) those bulk payments which may be imposed under existing legislation or which are provided under existing agreements or are the subject of an expression of intent by the prospective obligor deemed reliable by the chief fiscal officer of the City; and (iii) those governmental subsidies or payments which, under existing legislation, are subject to reasonably

precise calculation and, unless in such legislation or authorization to be of an annual or more frequently recurring nature, are payable in such year.

Details of Bonds and City Covenants

The Act provides that the ordinance authorizing the issuance of the Bonds shall fix the amount of Bonds to be issued and determine, or designate officers of the City to determine, the form and details of the Bonds. Subject to applicable constitutional provisions, the City may include in its bond ordinance various covenants with bondholders, including covenants governing the imposition, collection and disbursement of Project Revenues, project operation and maintenance, the establishment, segregation, maintenance, custody, investment and disbursement of sinking funds and reserves, the issuance of additional priority or parity Bonds, the redemption of Bonds and such other provisions as the City deems necessary or desirable in the interest of or for the protection of the City or of such bondholders. Under the Act, such covenants, terms and provisions of the bond ordinance constitute contractual obligations of the City subject to modification, with such limitations as may be specified in the bond ordinance, by agreement with a majority in interest of the bondholders or such larger portion thereof as may be provided in the bond ordinance.

Sinking Fund

The Act requires that the bond ordinance shall provide for the establishment and maintenance of a sinking fund or shall designate a previously established fund for the payment of the principal of and interest on the Bonds. Payment into such sinking fund shall be made in annual or more frequent installments and shall be sufficient to pay or accumulate for payment all principal of and interest on the Bonds for which the sinking fund is established as and when the same shall become due and payable. The sinking fund shall be managed by the chief fiscal officer of the City and moneys therein, to the extent not currently required, shall be invested, subject to limitations established by the bond ordinance and the Act. Interest and profits from investment of moneys in the sinking fund shall be added to such fund and may be applied in reduction of or to complete required deposits to the sinking fund. Excess moneys in the sinking fund shall be repaid to the City for its general purposes or as otherwise provided in the bond ordinance. All moneys deposited in the sinking fund, including the Sinking Fund Reserve established by the General Ordinance, are subject to a perfected security interest for the Bonds for which the fund is established until properly disbursed.

Refunding

Bonds from time to time outstanding under the Act or other bonds issued for purposes for which Bonds are issuable under the Act, whether issued before or after the effective date of the Act, may be refunded by Bonds issued under the Act and are subject to the same protections and provisions required for the issuance of an original issue of Bonds. Bonds will no longer be deemed to be outstanding obligations when the City shall have deposited with a bank, bank and trust company or trust company funds represented by demand deposits, interest-bearing time accounts, savings deposits, certificates of deposit (insured or secured as public funds) or specified obligations of the United States or of the Commonwealth of Pennsylvania, the principal and interest of which are sufficient to effect, and are irrevocably pledged to, the redemption or payment of such Bonds and, in the case of redemption, notice of such redemption or irrevocable instructions to give such notice shall have been duly given.

Validity of Proceedings: Suits and Limitations Thereon

Prior to the delivery of any Bonds, the City must file with the Court of Common Pleas a transcript of the proceedings authorizing issuance of the Bonds. If no action asserting the invalidity of such proceedings, or of the Bonds, is brought on or before the twentieth day following the date of recording of the transcript, the validity of the proceedings, the City's right to issue the Bonds, the lawful nature of the purpose for which the Bonds are issued, and the validity and enforceability of the Bonds in accordance with their terms may not thereafter be inquired into judicially, in equity, at law, or by civil or criminal proceedings, or otherwise, either directly or collaterally, except where a constitutional question is involved.

Exemption from State Taxation

The Commonwealth pledges with the holders from time to time of Bonds issued under the Act that such Bonds, their transfer and the income therefrom, including any gains made on the sale thereof (other than underwriting profits in a distribution thereof), shall at all times be free from taxation within and by the Commonwealth of Pennsylvania, but this exemption does not extend to underwriting profits or to gift, succession or inheritance taxes or any other taxes not levied directly on the Bonds, the receipt of income therefrom or the realization of gains on the sale thereof.

Defaults and Remedies

If the City should fail to pay the principal of or interest on any Bond when the same shall be due and payable, the

remedy provisions of the Act permit the holder of such Bond, subject to the limitations described below, to recover the amount due in an action in Philadelphia Common Pleas Court. However, a judgment rendered in favor of the bondholder in such an action is collectible only from Project Revenues. The holders of 25% in aggregate principal amount of Bonds which are in default, whether because of failure of timely payment which is not cured within 30 days or failure of the City to comply with any other provisions of the Bonds or any bond ordinance, may appoint a trustee to represent them. On being appointed, the trustee shall be the exclusive representative for the affected bondholders. The trustee may and, upon written request of the holders of 25% in aggregate principal amount of such Bonds, and on being furnished with indemnity satisfactory to it, shall take one or more of the following actions which, if taken, shall preclude similar action, whether previously or subsequently initiated by individual holders of Bonds: enforce, by proceedings at law or in equity, all rights of the holders of Bonds; bring suit on the Bonds; bring suit in equity to require the City to make an accounting for all pledged Project Revenues received and to enjoin unlawful action or action in violation of the holders' rights; and, after 30 days' written notice to the City, declare the unpaid principal of the Bonds to be immediately due and payable, together with interest thereon at the rates stated in the Bonds until final payment, and, upon the curing of all defaults, to annul such declaration. The court, in extreme cases of hardship, may provide for the payment of sums levied in five or less annual installments with interest at a rate sufficient to cover the interest accruing on the Bonds. In any suit, action or proceeding by or on behalf of holders of defaulted Bonds, trustee fees and expenses, including operating costs of a Project and reasonable counsel fees and all such costs and disbursements by the Court, shall be deemed additional principal due on the Bonds and shall be paid in full from any recovery prior to any distribution to the holders of the Bonds. The General Ordinance limits any such recovery to Project Revenues. The trustee shall make distribution of any sums so collected in accordance with the Act.

Refunding With General Obligation Bonds

Upon certification by the City's chief fiscal officer that Project Revenues for the payment of Bonds have become insufficient to meet the requirements of the ordinance or ordinances under which the Bonds were issued, the City Council is empowered, but not required, subject to applicable Pennsylvania constitutional debt limitation, to authorize the issuance and sale of general obligation refunding bonds of the City without limitation as to rate of interest, in such principal amount (subject to the aforesaid limitations on indebtedness) as may be required, together with other available funds, to pay and redeem such Bonds,

together with interest to the redemption date and redemption premium, if any.

THE GENERAL ORDINANCE

Ordinance of City Council approved May 30, 1975 - Bill No. 1871 (the "General Ordinance"), as amended by Ordinance of City Council approved July 26, 1979 - Bill No. 2068, Ordinance of City Council approved July 31, 1980 - Bill No. 274, Ordinance of City Council approved September 22, 1982 - Bill No. 1316, and Ordinance of City Council approved May 17, 1985 - Bill No. 534

Pursuant to the authorization contained in the Act, the City has adopted the General Ordinance. The City has made a pledge of, and has granted a security interest in all Project Revenues and all accounts, contract rights and general intangibles representing Project Revenues for the security and payment of all Bonds issued under the General Ordinance.

Definitions

"City Charges" are defined to be the proportionate charges for services performed for the Gas Works by all officers, departments, boards or commissions of the City which are contained in the computation of Operating Expenses of the Gas Works including, without limitation expenses of the Gas Commission and the base payments to the City contained in the agreement between the City and the manager of the Gas Works and all other payments made to the City from Project Revenues.

"Fiscal Year" is defined as the fiscal year for the Gas Works provided in any ordinance of the City from time to time enacted and, if no other Fiscal Year is established by ordinance, it shall mean the fiscal year of the City.

"Net Operating Expenses" are defined to be Operating Expenses exclusive of City Charges.

"Operating Expenses" are defined to be all costs and expenses of the Gas Works necessary and appropriate to operate and maintain the Gas Works in good operable condition during each Fiscal Year including, without limitation, the manager's fee, salaries and wages, purchases of services by contract, costs of materials, supplies and expendable equipment, maintenance costs, costs of any property or the replacement thereof or for any work or Project related to the Gas Works which does not have a probable useful life of at least five years, pension and welfare plan and workmen's compensation requirements, provision for claims, refunds and uncollectible receivables an for City Charges, all in

accordance with generally acceptable municipal accounting principles applied, but shall exclude depreciation and interest and sinking fund charges.

"Project Revenues" are defined to include all rents, rates and charges imposed or charged by the City upon the owners or occupants of properties connected to, and upon all users of gas distributed by the Gas Works and all other Project Revenues (as such term is defined the Act) derived from the Gas Works, and all accounts, contract rights and general intangibles representing the Project Revenues.

Additional Bonds

Bonds may be issued in one or more series as the City may from time to time determine by supplemental ordinance (a "Supplemental Ordinance"). The General Ordinance provides for the method of setting the details and terms of the Bonds authorized by such Supplemental Ordinance. The General Ordinance sets forth the manner of making payment of principal, interest and premium, the requirements governing such payment, the rules regarding registration, transfer and exchange of Bonds, and general provisions governing redemption and the effect thereof. The General Ordinance authorizes the issuance of definitive and temporary Bonds, provides for the execution of the Bonds and provides for the issuance of Bonds to replace mutilated, destroyed, lost or stolen Bonds.

Purposes For Which Bonds May Be Issued, Conditions of Issuance- Engineering Report

Bonds may be issued to (1) pay the cost of projects related to the Gas Works, (2) reimburse any City fund from which such costs shall have been paid or advanced, (3) fund any such cost for which the City shall have outstanding bond anticipation notes or other obligations, (4) refund any Bonds of the City issued for the foregoing purposes under the Act, or (5) refund any general obligation of the City issued for the foregoing purposes. However, the City covenants that it will not issue Bonds to provide funds to refund general obligation bonds or notes issued prior January 1, 1974.

The City covenants that so long as any Bonds shall remain outstanding, no Bonds will be issued unless the financial report of the City's chief fiscal officer, required by the Act to be filed with the City Council in connection with such issuance, shall be accompanied by an engineering report of an independent consulting engineer or an independent firm of consulting engineers, in either case having broad experience in the design and analysis of the operation of gas works or gas distribution systems of the magnitude and scope of the Gas Works and a favorable

reputation for competence in such field. The report must contain a statement that the engineers have made an investigation of the physical properties and of the books and records of the Gas Works.

On the basis of such investigation, the engineering report must contain the same matters, statements and opinions as are required to be contained in the report of the chief fiscal officer to the City Council, namely: (1) a brief description of the project or projects for which the Bonds are to be issued; (2) a statement identifying the sources from which the pledged Project Revenues are to be derived; (3) a statement that, on the basis of actual and estimated future annual financial operations of the Project from which the pledged Project Revenues are to be derived, the Project will, in the opinion of the engineers, yield pledged Project Revenues over the amortization period of such Bonds sufficient to meet the payment or deposit requirements of operating expenses, reserve requirements, debt service of all Bonds outstanding for which Project Revenues are pledged and surplus requirements fixed by the General Ordinance, or the Supplemental Ordinance authorizing the issuance of any series of Bonds, and (4) that the revenues upon which the preceding statements are based comply with the definition of "Project Revenues contained in the Act. The General Ordinance also requires that the engineering report state that the pledged Project Revenues are currently and will be sufficient to comply with the Rate Covenant and that the Gas Works are in good operating condition or that adequate steps are being taken to make them so.

Prior to the issuance of the Bonds, a transcripts of the proceedings authorizing the issuance of the Bonds shall also be filed with the Fiscal Agent, together with a copy of the engineering report.

Security

The Bonds are and will be equally and ratably secured by a pledge of and a security interest in all Project Revenues and the Sinking Fund, including the Sinking Fund Reserve.

Priority in Application of Project Revenues

Prior to default, the General Ordinance establishes the following priorities in the application of Project Revenues during each fiscal year:

First: to Net Operating Expenses;

Second: to required payments into the Sinking Fund to pay the principal of and interest on all Bonds issued under the

General Ordinance and to accumulate, or to restore any deficiency in the Sinking Fund Reserve;

Third: to the payment of general obligation bonds, which have been adjudged to be self-liquidating on the basis of expected revenues from the Gas Works;

Fourth: to the payment of interest and sinking fund charges of other general obligation debt incurred for the Gas Works; and

Fifth: to the payment of the principal of and interest on the Gas Works Notes and any amounts owed to the issuer of the Credit Facility established with respect to the Gas Works Notes; and

Sixth: to the payment of City Charges including the Base Payment (currently \$18,000,000) and the payment of rentals under the Lease (described under the caption, "ADDITIONAL DEBT" on a parity basis after the payments listed in items First through Fifth above.

The balance of the Project Revenues in any fiscal year may, upon the approval of the Gas Commission, be paid to the City, provided that in a given fiscal year the balance so paid does not exceed the amount of earnings on the Sinking Fund Reserve transferred and paid to PGW's operating funds during the same fiscal year. The General Ordinance does not require the segregation of revenues upon their collection prior to default. Ordinances adopted by the City in 1983 and 1988 allow the issuance of Gas Works Revenue Notes secured by Project Revenues, payment of which Notes shall be subordinated to the payments listed in clauses First through Fourth above.

Rate Covenant

The City covenants that it has authorized the imposition of rates and charges by the Gas Commission sufficient to comply with the Rate Covenant in the General Ordinance, and that it will not repeal or materially adversely dilute such authorization.

The Rate Covenant requires the City, at a minimum, to impose, charge and collect in each Fiscal Year such gas rates and charges as shall, together with all other Project Revenues to be received in such Fiscal Year, equal not less than the greater of:

A. The sum of:

(i) all Net Operating Expenses payable during such Fiscal Year;

(ii) 150% of the amount required to pay Sinking Fund requirements for the principal of and interest on all Bonds issued and outstanding under the General Ordinance which will become due and payable during such Fiscal Year; and

(iii) the amount, if any, required to be paid into the Sinking Fund Reserve during such Fiscal Year; or

B. The sum of:

(i) all Net Operating Expenses payable during such Fiscal Year; and

(ii) all Sinking Fund deposits required during such Fiscal Year in respect of all outstanding Bonds and in respect of all outstanding general obligation bonds issued for improvements to the Gas Works and all amounts, if any, required during such Fiscal Year to be paid into the Sinking Fund Reserve.

Additional Covenants

The City further covenants that it will pay or cause to be paid from the Project Revenues the principal of, premium, if any, and interest on all Bonds as the same shall become due and that it will continuously maintain in good condition and operate the Gas Works; and that will not, in any Fiscal Year, pay from Project Revenues any City Charges or deposit from the Project Revenues in the general sinking fund of the City any sinking fund charges in respect of general obligation bonds of the City unless, prior to or concurrently with such payment, it shall satisfy all Sinking Fund requirements on Bonds outstanding under the General Ordinance for such Fiscal Year.

Report Requirements

The City shall file with the Fiscal Agent not later than 120 days after the close of each Fiscal Year a report of the operation of the Gas Works, including specified financial data, showing compliance with the Rate Covenant and accompanied by a certificate of the manager of the Gas Works that the Gas Works are in good operating condition and a certificate of the Director of Finance that, as of the date of such report, the City has complied with all covenants and requirements of the General Ordinance and Supplemental Ordinances. Copies of such report will be available to bondholders and may be inspected and copied at all reasonable times by bondholders or their representatives.

General Obligation Bonds - Junior Lien Revenue Bonds

The City reserves the right to finance Gas Works Projects general obligation bonds or revenue bonds, under authorization other than the General Ordinance and Supplemental Ordinances, for the payment of which Project Revenues may be pledged, provided that such pledge is subject and subordinate to the prior payments in each Fiscal Year of Sinking Fund requirements of all Bonds issued under the General Ordinance.

Sinking Fund and Sinking Fund Reserve

A Gas Works Revenue Bond Sinking Fund is established for the benefit of all Bonds issued under the General Ordinance which shall be held in an account separate and apart from all other accounts of the City. On or before each interest and principal payment date for the Bonds, the Director of Finance shall deposit in the Sinking Fund from Project Revenues the amount sufficient, together with interest and profits on investments held therein, to pay the principal of and interest on the Bonds due and payable on such interest or principal payment date. The General Ordinance authorizes the appointment, in accordance with legal procedures, of one or more banks to act as Fiscal Agent and/or paying agent for all Bonds or for any series of Bonds issued thereunder and reserves to the City the right to appoint other or additional banks from time to time. The Fiscal Agent for any particular series will act as registrar and Sinking Fund Depository for that series. The moneys in the Sinking Fund are required to be secured, and invested and reinvested under management of the Director of Finance.

The Sinking Fund Reserve is established as a separate account in the Sinking Fund and is to be held by the Sinking Fund Depository. The Sinking Fund Reserve shall be funded from either (i) the proceeds of each series of Bonds in an amount equal to the maximum amount required in any fiscal year to pay the debt service on the Bonds of such series becoming due and payable in such fiscal year or (ii) the accumulation of Project Revenues over a period of not more than six fiscal years.

The moneys and investments (valued at market) in the Sinking Fund Reserve shall be maintained in an amount equal at all times to the maximum principal and interest requirements in any subsequent fiscal year of all Bonds issued and outstanding under the General Ordinance; Provided, however, that the Supplemental Ordinance authorizing the issuance of any such series may provide for the funding of such amount from Project Revenues over a period of not more than six Fiscal Years after the issuance and delivery of such Bonds. If at any time the moneys in the Sinking Fund, other than in the Sinking Fund Reserve, are insufficient to pay when due the principal of (and premium, if any) or interest

on any Bond or Bonds, the Sinking Fund Depositary shall withdraw from the Sinking Fund Reserve and pay to the Fiscal Agent the amount of such deficiency. If, by reason of such withdrawal or for any other reason, there shall be a deficiency in the Sinking Fund Reserve, the City covenants to restore such deficiency by daily deposits of at least 50% of Project Revenues.

Transfer of Income on Sinking Fund Reserve

The General Ordinance provides that all interest and income earned moneys held in the Sinking Fund Reserve may, to the extent not required to comply with the requirements of the General Ordinance relating to the Sinking Fund Reserve, be transferred to the operating funds of the Gas Works to be applied as Project Revenues in accordance with the terms of the General Ordinance. To the extent that in any Fiscal Year a balance remains in the Project Revenues, such balance, upon approval of the Gas Commission, may be paid to the City, provided that in a given Fiscal Year such balance does not exceed the amount of Sinking Fund Reserve Earnings transferred to the operating funds during the same Fiscal Year.

Remedies; Limitations on Liabilities of City

In addition to the remedies provided by the Act, if the City shall fail or neglect to make deposits into the Sinking Fund, including the Sinking Fund Reserve, in the amounts and at the times required by the General Ordinance or if, for any reason, moneys in the Sinking Fund shall be insufficient to pay debt service on any Bonds, the City shall, immediately and without notice, deposit on a daily basis 50% of all Project Revenues, or such greater percentage thereof as the Director of Finance shall determine, in the Sinking Fund, so long as the default or deficiency shall continue. The General Ordinance provides that all remedies are enforceable only against pledged Project Revenues and investments thereof, and that no decree or judgment against the City on action brought under the provisions of the General Ordinance shall order, or be construed to permit, the occupation, attachment, seizure or sale upon execution of any other property of the City.

Amendments

The General Ordinance and any Supplemental Ordinance may be amended without the consent of any bondholders to cure ambiguities, formal defects or omissions, or to grant to bondholders or any trustee therefor additional rights, remedies, powers or security, to comply with mandatory provisions of state or federal law or with permissive provisions of such law which do not substantially impair the security or right to payment of bondholders. The General Ordinance may be amended in such other

respects as may be authorized by 67% in principal amount of the holders of Bonds outstanding and affected, but no alteration of the amount, rate or time of payment, respectively, of the principal thereof or the interest thereon or of the redemption provisions may be made without the consent of the holders of all Bonds outstanding and affected.

Amendments Not Affecting Outstanding Bonds

The General Ordinance or any part thereof may be amended and the foregoing covenants (including the Rate Covenant) may be rescinded, amended or supplemented by further covenants and agreements, from time to time by Supplemental Ordinance, but no such amendments or further provisions, terms, covenants or agreements contained in a Supplemental Ordinance, other than those permitted by and adopted pursuant to 8.01 of the General Ordinance governing amendments generally, which shall be inconsistent with, or would impair a prior covenant in, the General Ordinance as at the time amended or supplemented, shall become effective until all Bonds, the holders of which are entitled to the protection of, or to force compliance with, such prior provisions or covenants, shall provide written consent. Any other amendments not listed above may be authorized in writing by the holders of 67% in principal amount of the bonds outstanding and affected.

THE THIRTEENTH SUPPLEMENTAL ORDINANCE

(Ordinance of City Council approved June 6, 1991,
Bill No. 1440)

The Thirteenth Supplemental Ordinance authorizes the Mayor, City Controller and City Solicitor (the "Bond Committee"), or a majority of them, to sell, in one or more series, Gas Works Revenue Bonds in the maximum aggregate principal amount of \$75,000,000, provided that such aggregate principal amount may be increased to reflect sales of such Bonds at discounts which are in lieu of periodic interest, so long as the aggregate gross proceeds to the City from the sale of such Bonds do not exceed \$75,000,000, and authorizes a majority of the Bond Committee to establish the terms and provisions of such Bonds.

The Thirteenth Supplemental Ordinance states that the Bonds are to be issued for any or all of the following purposes: (i) acquiring and constructing the capital improvements included in the capital program of PGW as from time to time included in the capital budgets of PGW, as approved by City Council; (ii) paying the costs of issuing the Bonds, and making any required deposit to the Sinking Fund Reserve; and (iii) paying any other Project Costs (as defined in the Act), which may include, without

limitation, the repayment to any fund of the City, or to accounts of the Gas Works of amounts advanced for Project Costs, and the funding or refunding of outstanding bond anticipation notes or other obligations of the City issued in respect of Project Costs.

Based on the report of the Director of Finance filed with City Council pursuant to the Act, the Thirteenth Supplemental Ordinance determines that the pledged Project Revenues (as defined in the General Ordinance) will be sufficient to comply with the Rate Covenant contained in the General Ordinance and also to pay all costs, expenses and payments required to be paid therefrom in their order of priority as set forth in the General Ordinance.

The City covenants in the Thirteenth Supplemental Ordinance that the proceeds of the sale of the Bonds which remain available for payment of costs of capital improvements shall be deposited in, held in and disbursed from one or more unsegregated accounts of PGW which shall be separate and apart from and not commingled with the consolidated cash account of the City or any other account of the City not held exclusively from Gas Works purposes.

The City covenants in the Thirteenth Supplemental Ordinance that, so long as any Bonds issued thereunder remain unpaid, it shall make payments or cause payments to be made out of the Sinking Fund created under the General Ordinance at such times and in such amounts as shall be sufficient to pay interest on and principal of any Bonds when due.

It authorizes the Director of Finance and any member of the Bond Committee to make such covenants as may be necessary or advisable to insure that the Bonds issued thereunder will not be "arbitrage bonds" as defined in the Internal Revenue Code of 1986, as amended, and in order to otherwise effect or maintain the exclusion of interest on the Thirteenth Series Bonds from gross income for federal income tax purposes.

The Thirteenth Supplemental Ordinance authorizes the City to accumulate from Project Revenues over a period of not more than six Fiscal Years from the date or dates of issuance and delivery of the Bonds issued thereunder the amount required to be deposited in the Sinking Fund Reserve in respect thereof.

APPENDIX D
Certain Financial Information
Concerning The City of Philadelphia

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Financial Position of the City

The City experienced a series of general fund deficits for Fiscal Years 1988 through 1990 which have culminated in the City's financial difficulties in recent months. The City is projecting a cumulative general fund deficit of approximately \$219.4 million for Fiscal Year 1991. In order to balance the general fund budget for Fiscal Year 1992, which was adopted by City Council and signed by the Mayor on June 13, 1991, assumptions were made regarding the collection of certain revenues and the reduction of certain expenses. The realization of the revenues and the reduction in expenses cannot be assured.

The Fiscal Year 1992 adopted budget includes revenues in the amount of approximately \$173.8 million which are of a contingent or speculative nature. Of this \$173.8 million, \$75 million are expected to be generated by the imposition and collection of a 1% sales tax to be collected within the City. The sales tax was authorized to be collected pursuant to the Intergovernmental Cooperation Act and an ordinance of City Council approved by the Mayor on June 12, 1991 imposing the tax within the City. An additional \$75 million of revenues in the adopted budget are projected to be forthcoming from the Commonwealth. The remainder of the projected revenue increases consist of \$16.3 million of base revenue increases and additional federal aid in the amount of \$7.5 million.

The Fiscal Year 1992 adopted budget also projects a reduction in expenditures and other adjustments totalling \$65.4 million. Of this amount, \$57.4 million represents reductions in expenditures from Fiscal Year 1992 current level forecasts.

In addition to the increased revenues (\$173.8 million) and the reduced expenditures and other adjustments (\$65.4 million) referred to above, the Fiscal Year 1992 adopted budget anticipates financial assistance from the Authority in the amount of \$261.4 million. For a detailed discussion of the Authority and the Intergovernmental Cooperation Act which authorizes its creation, see "Intergovernmental Cooperation Authority" herein. The financial assistance from the Authority is expected to be derived from the proceeds of deficit reduction bonds issued by the Authority and will fund the projected Fiscal Year 1991 deficit of \$219.4 million and the projected Fiscal Year 1992 anticipated shortfall in operating revenues of \$42.0 million. The City has no legal authority to issue deficit reduction bonds. Failure to realize the projected revenues, achieve the expected expense reductions or receive the proceeds of such deficit reduction bonds may result in the City's inability to pay all its operating expenses, including payroll obligations and debt service on its general obligation bonds, during the fiscal year ending June 30, 1992. See "Summaries of Financial Operations - General Fund - Fiscal Year 1991 Estimated Results; General Fund - Fiscal Year 1992 Proposed Budget" herein.

The financial position of the City also may be affected by litigation against the City as described under "Litigation and Other Matters" in APPENDIX E.

Independent Audit and Opinion of the City Controller

The Office of City Controller has examined and expressed opinions on the financial statements of the various funds of the City contained in the Comprehensive Annual Financial Reports of the Director of Finance for all prior years of the City. In the audit report of the Office of City Controller, dated January 24, 1991, with respect to the general purpose financial statements of the City as of June 30, 1990 and for the year then ended, and in an accompanying footnote, the Office of City Controller states that the City's recurring general fund losses from operations and increasing deficits in the general fund balance raise substantial doubt about the City's ability to continue as a going concern, in that the City may not continue to meet its obligations as they become due without substantial disposition of assets outside the ordinary course of business, restructuring of debt, external forced revisions of its operations, or similar actions. The general purpose financial statements included in such audit report were prepared assuming that the City will continue as a going concern, and did not include any adjustments that might result from the outcome of this uncertainty.

The Office of the City Controller has not participated in the preparation of this Appendix nor in the preparation of the budget estimates and projections set forth in the various tables contained in this Appendix or otherwise set forth herein. Consequently, the Office of the City Controller expresses no opinion with respect to any of the data contained in this Appendix. The financial statements, tables, statistics and other information contained in this Appendix have been prepared by the Office of the Director of Finance and can be reconciled to the financial statements in the Comprehensive Annual Financial Reports of the Director of Finance.

Certificate of Conformance in Financial Reporting

The Government Finance Officers Association of the United States and Canada ("GFOA") awarded a Certificate of Conformance in Financial Reporting, now called the Certificate of Achievement in Financial Reporting (the "Certificate"), to the City for its Comprehensive Annual Financial Report for Fiscal Years 1980 through 1989.

In order to be awarded a Certificate, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. A Certificate is valid for a period of one year only. The GFOA has also awarded the City an award for Distinguished Budget Presentation for the Fiscal Years 1986 - 1989 and the

GFOA's Award for Excellence in Financial Management in Fiscal Year 1989.

Basis of Accounting

The City's basis of accounting for annual reporting purposes is as follows:

A. Governmental Funds (which include the General Fund, County Liquid Fuels Tax Fund, Special Gasoline Tax Fund, Grants Revenue Fund, Community Development Fund, Hotel Room Rental Tax Fund, Capital Improvement Funds and Debt Service Funds) and Expendable Trust and Agency Funds are accounted for on the modified accrual basis. Under this method, revenues are recognized in the accounting period in which they become both available and measurable. Licenses and permits, charges for service, fines and forfeits and miscellaneous revenues are recorded as revenues when received in cash because they are generally not measurable until actually received. General property taxes, self-assessed taxes and investment earnings are recorded when earned as they are measurable and available. Expenditures are recognized in the accounting period in which the fund liability is incurred, if measurable, except expenditures for debt service, prepaid expenditures, and other long term obligations which are recognized when paid.

B. Proprietary Funds (which include the Water Fund, Aviation Fund and Convention and Civic Center Fund) and Pension Trust Funds are accounted for on the accrual basis, in which revenues are recognized in the accounting period in which they are earned and expenses are recognized at the time they are incurred.

During Fiscal Year 1979, financial statements for the Proprietary Funds were changed to conform to the description above in order to bring their presentation into accord with generally accepted accounting principles as recommended by the National Council on Governmental Accounting as outlined in Statement No. 1. However, the Proprietary Funds are shown in the tables herein on the modified accrual basis for two reasons: (i) because the City's Operating Budget is prepared on a modified accrual basis; and (ii) in order to achieve a consistent presentation of the City's finances as a whole.

Budget Adoption Procedure

At least thirty days before the end of each fiscal year, as required by the Charter, City Council must adopt by ordinance an operating budget, a capital budget for the ensuing fiscal year and a capital program for the six ensuing years (which do not include the capital program or capital budget of PGW, which are separately approved by City Council). At the first meeting of

City Council occurring at least ten days after the adoption of each of such ordinances and its receipt by the Mayor, he must approve or disapprove such ordinance or the ordinance becomes effective.

The operating budget for the next fiscal year is prepared by the Mayor in proposed form and is required by the Charter to be submitted at least ninety days before the end of the fiscal year to City Council for adoption. The budget as adopted must be balanced and provide for discharging any estimated deficit or using any estimated surplus carried over from the current fiscal year and make appropriations for all items to be met from City revenues. The Mayor's budgetary estimates of revenues for the ensuing fiscal year and of surplus or deficit, if any, for the current fiscal year may not be altered by City Council. Not later than the passage of the operating budget ordinance, City Council must enact such revenue measures as will, in the opinion of the Mayor, yield sufficient revenues to balance the budget.

The capital program is prepared annually by the City Planning Commission to show the capital expenditures planned for each of the six ensuing fiscal years, including the estimated total costs of each project and the sources of funding (local, state, federal and private) estimated to be required to finance each project. The capital program is reviewed by the Mayor and transmitted to City Council for adoption with his recommendation thereon.

The capital budget ordinance, authorizing in detail the capital expenditures to be made or incurred in the ensuing fiscal year from City Council controlled or appropriated funds, is adopted by City Council concurrently with the capital program. The capital budget must be in full conformity with that part of the capital program applicable to the fiscal year which it covers.

The Mayor presented his proposed Fiscal Year 1992 operating budget to City Council on March 27, 1991. The Fiscal Year 1992 operating budget, as proposed by the Mayor, included both the proposed spending plans of the City's various departments, agencies, boards and commissions and the proposed revenue measures that are required, in the Mayor's opinion, to ensure a balanced budget. City Council revised and adopted the Mayor's proposed operating budget on May 30, 1991 by a vote of 14-0. The Mayor approved the operating budget on June 13, 1991.

SUMMARIES OF FINANCIAL OPERATIONS

Tables 1 and 2 summarize the operations of the City's General Fund and of its Principal Operating Funds (Debt Related), including the General Fund, for the Fiscal Years 1985-1990, the estimated operation of such funds for Fiscal Year 1991, and the adopted budget for Fiscal Year 1992.

General Fund - Fiscal Years 1985 through 1990

Ending fund balances in the General Fund for Fiscal Years 1985 through 1990 were as follows:

<u>Fiscal Year</u> <u>Ending June 30</u>	<u>(in millions)</u>
1985	\$11.5
1986	4.7
1987	12.4
1988	(32.1)
1989	(75.2)
1990	(72.7)

Fiscal Years 1985 through 1987 closed with modest surpluses aided by one-time revenue measures such as asset sales and bond refundings. While the ending fund balances were positive, operating results were negative, as shown on Table 1. Annual expenditures in each of those years exceeded the annual revenues. By Fiscal Year 1988 operating deficits could not be eliminated. Operating deficits have continued, resulting in an estimated cumulative General Fund deficit in Fiscal Year 1991 of \$219.4 million. See "General Fund - Fiscal Year 1991 Estimated Results" below.

General Fund - Fiscal Year 1991 Estimated Results

The City currently estimates a Fiscal Year 1991 ending fund balance deficit in the General Fund of \$219.4 million. Current projected revenues have decreased by \$145.6 million since the Fiscal Year 1991 budget was adopted. The City budgeted revenues from a local sales tax (expected to generate \$45 million) and mandatory withholding of wage tax by non-Philadelphia employers (expected to generate \$8 million); both revenue sources required the enactment of legislation by the General Assembly of the Commonwealth, which legislation was not enacted. In addition, the City budgeted an additional \$10 million from base State aid, only \$4 million of which was appropriated when the Commonwealth adopted its fiscal year 1991 budget. These items collectively account for \$58 million of the revenue shortfall.

The remaining revenue shortfalls are accounted for primarily by declines in local and regional economic conditions which have caused tax receipts to be lower than budgeted by \$51.2 million. Real estate and real property transfer taxes are \$31.2 million below the original budget due to stagnant property values and a slowdown in market activity. The remaining \$20.0 million is due to declines in wage and earnings taxes and business taxes due to the recession. Local economic forecasts, unemployment statistics and similar economic indices all confirm that Philadelphia is in

the midst of an economic slowdown. These economic trends contribute to an already serious fiscal situation.

The loss of revenues associated with the economic slowdown is further compounded by an estimated \$35.4 million in lower non-tax and intergovernmental revenues. Locally generated non-tax revenues are estimated to be \$22.5 million below budget due primarily to the loss of interest earnings due to lower average monthly cash balances and declines in the collections of parking and other miscellaneous fine and fee revenue. Revenue from other governments and other funds is expected to decline by \$12.9 million.

Gross obligations are now estimated at \$57.8 million over the adopted budget. These obligations would have been much higher had the City not instituted stringent cash conservation measures during the year. The increased obligations are as follows:

(a) \$42.6 million in arbitration awarded employee wage and benefit increases.

(b) \$32.4 million in additional expenditures for state-mandated Children and Youth services which were not funded by the Commonwealth.

(c) \$16.2 million in additional appropriations for the core court agencies based upon the mandamus action filed by the courts in August 1990.

(d) \$15.4 million for settlement of the real property transfer tax litigation and other litigation settlements.

(e) \$8.0 million in additional pension payment requirements. Due to the City's cash problems it has delayed payment to the Pension Fund incurring additional interest costs of \$8.0 million.

(f) \$1.5 million for additional community based residential beds for sentenced offenders as part of the ongoing criminal justice facilities improvement.

(g) \$.4 million in other miscellaneous adjustments.

In the absence of any corrective actions by the City, these adjustments would have added an additional \$116.5 million to the Fiscal Year 1991 obligation level. However, as a result of the failure to issue temporary loan notes during the first half of the fiscal year and the resultant cash shortage, the City instituted a hiring and purchasing freeze. It is currently estimated that these measures will generate \$58.7 million in savings, thereby reducing the need for additional appropriations from \$116.5 million to \$57.8 million.

These revenue and obligations adjustments in combination with the actual Fiscal Year 1990 fund balance deficit being \$11.9 million higher than anticipated produce a Fiscal Year 1991 estimated deficit of \$219.4 million.

It is currently anticipated that the Fiscal Year 1991 deficit will be eliminated through financial assistance provided by the Authority by the issuance of its deficit reduction bonds. See "Intergovernmental Cooperation Authority" herein.

The imbalance between revenues and obligations in Fiscal Year 1991, when combined with the seasonal cash flow shortfall typically experienced by the City in the fall and winter of each year, resulted in a severe cash flow deficiency during Fiscal Year 1991 which constrained operations of the City. The City was unable to sell its temporary loan notes in the public capital markets during this period and experienced substantial difficulty negotiating the sale of the temporary loan notes to commercial banks. The City was able to meet all payroll, debt and lease obligations during Fiscal Year 1991 in a timely manner, but its ability to meet obligations to vendors, suppliers and contractors was severely constrained until the sale of temporary loan notes in January and February 1991.

General Fund - Fiscal Year 1992 Adopted Budget

In Fiscal Year 1992 the City faces a twofold financial problem:

(1) A projected Fiscal Year 1991 deficit of \$219.4 million; and

(2) A projected Fiscal Year 1992 structural gap of \$265.1 million.

The Fiscal Year 1992 General Fund budget as adopted by City Council and approved by the Mayor assumes that the Fiscal Year 1991 deficit will be eliminated through financial assistance provided by the Authority by the issuance of its deficit reduction bonds. See "Intergovernmental Cooperation Authority" herein.

The Fiscal Year 1992 structural gap is proposed to be eliminated through a combination of new local sales tax, program reductions and additional Commonwealth and Federal aid.

(A) LOCAL SALES TAX: The adopted Fiscal Year 1992 budget assumes the enactment of a 1% sales tax to be levied within the City. The Intergovernmental Cooperation Act authorizes the imposition of the tax by the City and City Council enacted an ordinance approved by the Mayor levying the tax. The sales tax is estimated to yield \$100 million on an annual basis. The adopted budget assumes \$75 million

in Fiscal Year 1992 collections based upon enactment of the tax for 9 months of the fiscal year.

(B) PROGRAM REDUCTIONS: The adopted Fiscal Year 1992 budget includes obligation reductions of \$57.4 million from the Fiscal Year 1992 current service level forecasts. Of these savings, \$16 million have been made possible by the intervention of the Pennsylvania Supreme Court on behalf of the City. The Supreme Court has ordered Traffic Court, Municipal Court and Common Pleas Court funding at their Fiscal Year 1991 adopted budget level.

An additional \$31.4 million in savings is projected from the elimination of vacancies in City departments and other program reductions.

The remaining \$10 million in savings is projected to be achieved by restructuring the City's lease obligations to the Philadelphia Municipal Authority ("PMA") through the issuance of certain PMA bonds.

(C) STATE AID: The adopted Fiscal Year 1992 budget assumes additional Commonwealth funding in the amount of \$75 million. Of this additional revenue \$50 million is projected to be generated by capping the City's funding of the Children and Youth program at \$27 million. The Commonwealth will be asked to pay for the remaining cost of Children and Youth services in the City. The source of the remaining \$25 million is unspecified.

(D) FEDERAL AID: The adopted Fiscal Year 1992 budget assumes additional federal aid in the amount of \$7.5 million for the City's Department of Licenses and Inspections and Public Health.

The following schedule summarizes the adopted Fiscal Year 1992 structural gap closing plan:

(000's omitted)

REVENUE:

Fiscal Year 1991 General Fund Revenue..... \$2,006,338
Fiscal Year 1992 General Fund Base Revenue... 2,052,635

Base Revenue Increase..... \$ 46,297

Percentage Increase..... 2.3%

Fiscal Year 1992 General Fund Base Revenue... \$2,052,635
Commonwealth Pension Contribution..... 37,000

Revised General Fund Base Revenue..... 2,089,635

Increases to Base Revenue:

(1) Sales Tax (9 months collection)..... 75,000
(2) Additional State Aid..... 75,000
(3) Intergovernmental Cooperation Authority
Bond Proceeds..... 42,000
(4) Base Revenue Increases (Interest
earnings, Title IV-E funding and
Supplemental Security Income funding. 16,280
(5) Additional Federal Aid..... 7,500

Subtotal, Revenue Adjustments..... 215,780

REVISED FY 1992 GENERAL FUND REVENUE..... \$2,305,415

OBLIGATIONS:

Fiscal Year 1992 General Fund Base
Obligations..... \$2,333,772
Commonwealth Pension Contribution..... 37,000
Court Mandamus Request..... (16,000)

Revised General Fund Base Obligations..... 2,354,772

Reductions to Base Obligations:

(1) Program Cuts..... (31,357)
(2) Debt Service Savings resulting from
partial retirement of PMA Lease
Obligations..... (10,000)

REVISED FY 1992 GENERAL FUND OBLIGATIONS..... \$2,313,415

Operating Surplus/Deficit..... \$ (8,000)
Prior Year Adjustments..... 8,000

Fund Balance 6/30/92..... \$ 0

The administration of the City believes that the revenue measures outlined above will generate the forecasted \$215.8 million in additional revenues. However, enactment of these revenue measures is dependent upon action by the Commonwealth (in the case of additional state aid and issuance of deficit reduction bonds by the Authority) and the United States (in the case of additional federal aid). There can be no assurance that all or any of these revenue measures will be realized. Failure of one or more of these revenue measures to be realized will cause a deficit in the adopted Fiscal Year 1992 budget and will force the City to find other sources of revenue and/or to reduce expenditures accordingly. Either option may be extremely difficult for the City. A significant portion of the City's Fiscal Year 1991 estimated general fund deficit was caused by the inclusion in the Fiscal Year 1991 adopted budget of revenues (such as proceeds of tax measures or Commonwealth assistance) that were contingent or speculative and were not realized. The largest component of the proposed Fiscal Year 1992 budget is personnel costs and the majority of the City's workforce is covered by a labor contract through June 30, 1992 that prohibits layoffs.

In addition, the Intergovernmental Cooperation Act permits, and City Council has enacted ordinances which require, a portion of the revenues derived from the locally-generated taxes be applied to pay the debt service requirements on the deficit reduction bonds. The effect of that application is to reduce the proceeds of such taxes which will be available to the City's general fund in each year in which such bonds are outstanding. See "Intergovernmental Cooperation Authority" herein.

The adopted Fiscal Year 1992 budget also contains \$57.4 million in expenditure reductions from Fiscal Year 1992 current service level forecasts. These reductions consist of (i) \$16.0 million in court cost reductions for the City courts, including Traffic Court, Municipal Court and Common Pleas Court, (ii) \$31.4 million in cost reductions achieved by not filling vacant positions at the City and by spending cuts to certain City programs, and (iii) \$10.0 million in cost reductions achieved by reducing the City's lease obligations to PMA through the issuance of certain PMA Bonds. There can be no assurance that such expense reductions can be achieved. Failure to achieve such expense reductions would require the City to find additional sources of revenue, which may not be available.

City Payments to SEPTA

SEPTA, the region's mass transit system, is the fourth largest mass transit system in the nation. In recent years SEPTA's operations have been pressured by increasing operating costs. Requirements to replenish the capital plant are not being met and are growing. The City's Fiscal Year 1991 budget and the adopted

Fiscal Year 1992 budget assume annual operating subsidies by the City of \$45 million to SEPTA. In Fiscal Year 1991, \$33,950,000 of the subsidy has been paid by the City to date. If the City is not able to pay the remaining \$11,050,000 in Fiscal Year 1991 and if the City is unable to make contributions in Fiscal Year 1992 and future fiscal years, further strains on SEPTA operations would be experienced, possibly resulting in significant SEPTA service cutbacks. Even if the City pays SEPTA \$45 million in Fiscal Year 1992, the City will be paying approximately \$22 million less than the amount needed under the Commonwealth formula for maximizing state matching funds. Such \$22 million shortfall could result in SEPTA not receiving an additional \$66 million in aid from the Commonwealth.

Labor Relations

The City conducts collective bargaining with four major bargaining units. Approximately 16,000 non-uniformed employees are represented by District Councils 33 and 47 of the American Federation of State, County and Municipal Employees, AFL-CIO. The bargaining units for uniformed employees are the Fraternal Order of Police (the "FOP"), Lodge No. 5 of the Philadelphia Fire Fighters Association, Local 22, International Association of the Fire Fighters, AFL-CIO, and represent approximately 9,200 employees.

Uniformed employees bargain under Act 111 of 1968 which provides for final and binding arbitration for collective bargaining disputes.

On July 1, 1991 the City will begin the fourth year of a four year contract with non-uniformed union members and the second year of a two year contract with uniformed union members. The non-uniformed employees' contract calls for an 8% wage increase effective April 1, 1992 and also includes a no layoff provision in effect through June 30, 1992; the uniformed employees' contract calls for a 5% wage increase effective July 1, 1991. These wage increases are included in the adopted Fiscal Year 1992 budget.

The City's contract with the non-uniformed employees provided for expenditure levels on health and welfare benefits at specified levels during the first two years of such contract (Fiscal Years 1989 and 1990), with expenditure levels for the last two years of the contract (Fiscal Years 1991 and 1992) to be negotiated. Negotiations between the City and District Councils 33 and 47 with respect to health and welfare expenditure levels for Fiscal Years 1991 and 1992 have reached an impasse. The contracts provide that in the event of an impasse such health and welfare benefit payment levels will be determined by binding arbitration. In the event that the arbitration award exceeds the

amounts budgeted by the City, the City's financial position could be materially adversely affected.

The Intergovernmental Cooperation Act provides that once a five-year financial plan of the City has been approved by the Authority, labor arbitration decisions governing uniformed City employees as to increases in pay and benefits shall consider and give substantial weight to the approved financial plan and the financial condition of the City.

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TABLE 1
 CITY OF PHILADELPHIA
 GENERAL FUND
 SUMMARY OF OPERATIONS
 (Modified Accrual Basis)
 (Amounts in Millions of Dollars)

	Actual						Current Estimate 1991(b)	Adopted Budget 1992
	1985	1986	1987	1988	1989	1990		
Cumulative Fund Balance (Deficit)								
Beginning of Year.....	\$ 25.5	\$ 11.5	\$ 4.7	\$ 12.4	\$ (32.1)	\$ (75.2)	\$ (72.7)	\$ 0.0(c)
REVENUES								
Real and Personal Property Taxes...	228.3	241.2	261.3	275.2	286.7	314.0	331.4	342.3
Wage and Earnings Tax.....	712.5	753.3	803.6	856.7	892.3	927.6	960.0	806.2
Net Profits Tax.....	33.1	25.7	31.3	31.6	21.7	20.2	20.0	16.0
Business Privilege Tax.....	107.1	135.2	156.6	165.7	201.7	207.5	215.6	220.2
Other Taxes.....	48.9	60.0	73.8	86.7	89.0	93.6	76.8	151.5
Total Taxes.....	1,129.9	1,215.4	1,326.6	1,415.9	1,491.4	1,562.9	1,603.8	1,536.2
Locally Generated Non-Tax Revenue..	102.5	106.8	100.4	105.9	123.4	110.6	91.6	99.2
Revenue from Other Governments.....	286.6	315.5	286.9	288.7	310.8	292.3	295.7	656.8(d)
Receipts from Other City Funds.....	16.6	14.0	17.4	19.5	20.2	18.5	15.2	13.2
TOTAL REVENUE.....	1,535.6	1,651.7	1,731.3	1,830.0	1,945.9	1,984.3	2,006.3	2,305.4
OBLIGATIONS/APPROPRIATIONS								
Personal Services.....	663.8	712.6	753.1	797.0	810.7	821.3	862.5	911.9
Purchase of Services.....	411.9	435.5	472.0	533.1	623.9	601.6	651.0	662.6
Materials, Supplies and Equipment..	51.8	50.9	48.4	51.7	51.3	55.0	57.7	60.5
Employee Benefits.....	258.7	269.2	286.4	313.4	321.3	339.6	386.0	444.1
Indemnities, Contributions and Grants (a).....	42.0	54.6	63.7	93.0	59.9	48.4	62.2	60.8
Debt Service.....	121.6	120.9	98.8	93.7	129.3	126.1	123.1	150.7
Other.....	0.4	0.1	--	--	--	4.0	4.0	4.9
Payments to Other Funds.....	11.2	17.5	11.6	12.5	14.5	12.9	14.5	17.9
TOTAL OBLIGATIONS/APPROPRIATIONS...	1,561.4	1,661.3	1,734.0	1,894.4	2,010.9	2,008.9	2,161.0	2,313.4

Operating Surplus (Deficit) for the Year.....	(25.8)	(9.6)	(2.7)	(64.4)	(65.0)	(24.6)	(154.7)	(8.0)
Adjustments to Beginning Fund Balance.....	11.8	2.8	10.4	19.9	21.9	27.1	8.0	8.0
Adjustments to Ending Fund Balance.....	--	--	--	--	--	--	--	--
Cumulative Fund Balance (Deficit) End of Year.....	<u>\$ 11.5</u>	<u>\$ 4.7</u>	<u>\$ 12.4</u>	<u>\$ (32.1)</u>	<u>\$ (75.2)</u>	<u>\$ (72.7)</u>	<u>\$ (219.4)</u>	<u>\$ 0.0</u>

NOTES:

- (a) Includes the City's contributions to the School District in Fiscal Years 1985 (\$2.2 million), and 1988 (\$8.0 million).
- (b) Estimated as of March 27, 1991.
- (c) Assumes the Fiscal Year 1991 deficit will be eliminated through deficit reduction bonds. See "PROPOSED DEFICIT REDUCTION AUTHORITY" herein.
- (d) Assumes \$42 million received to balance the Fiscal Year 1992 budget from proceeds of deficit education bonds. See "PROPOSED DEFICIT REDUCTION AUTHORITY" herein. Also includes \$188.0 million of Wage and Earnings tax revenues and \$2.0 million of Net Profits tax revenues which were dedicated to the Intergovernmental Cooperation Authority and which are expected to be returned to the City during Fiscal Year 1992.

Figures may not add due to rounding.

TABLE 2

CITY OF PHILADELPHIA
 PRINCIPAL OPERATING FUNDS (DEBT RELATED)
 SUMMARY OF OPERATIONS
 (Modified Accrual Basis)
 (Amounts in Millions of Dollars)

	Actual						Current Estimate 1991(d)	Adopted Budget 1992
	1985	1986	1987	1988	1989	1990		
Cumulative Fund Balance (Deficit)								
Beginning of Year.....	\$ 79.7	\$ 67.5	\$ 50.4	\$ 39.9	\$ 18.0	\$ (47.6)	\$ (64.2)	\$ (4.5)(e)
REVENUES								
General Fund (a).....	1,535.6	1,651.7	1,731.3	1,830.0	1,945.9	1,984.3	2,006.3	2,305.4
Water Fund (b).....	236.2	233.1	254.4	282.6	273.2	282.9	289.2	347.4
Aviation Fund (c).....	56.4	60.2	61.2	70.2	72.3	77.4	120.5	133.7
Other Operating Funds.....	18.3	18.4	18.2	18.7	19.4	67.7	28.8	30.0
TOTAL REVENUES.....	1,846.5	1,963.4	2,065.1	2,201.5	2,310.8	2,412.3	2,444.8	2,816.5
OBLIGATIONS/APPROPRIATIONS								
Personal Services.....	730.7	789.2	833.4	885.3	905.8	919.2	968.8	1,028.4
Purchase of Services.....	468.6	500.5	545.3	605.9	699.9	728.6	743.0	780.5
Materials, Supplies & Equipment.....	78.3	83.9	84.6	83.5	79.6	87.8	91.6	101.2
Employee Benefits.....	280.6	293.1	315.9	343.4	355.4	378.6	427.8	490.1
Indemnities, Contributions and Grants.....	43.6	55.4	65.8	98.4	66.5	52.0	69.6	68.5
Debt Service.....	238.8	236.9	217.2	214.6	263.8	262.1	275.5	315.6
Other.....	0.4	0.1	--	--	--	4.0	4.0	5.4
Payments to Other Funds.....	36.1	37.2	33.5	34.5	39.6	37.3	41.8	38.3
TOTAL OBLIGATIONS/APPROPRIATIONS....	1,877.1	1,996.3	2,095.7	2,265.6	2,410.6	2,469.6	2,622.1	2,828.0

Operating Surplus (Deficit) for the Year.....	(30.6)	(32.9)	(30.6)	(64.1)	(99.8)	(57.3)	(177.3)	(11.5)
Adjustments to Beginning Fund Balance.....	18.4	15.8	20.1	42.3	34.2	40.7	17.6	17.1
Adjustments to Ending Fund Balance.....	--	--	--	--	--	--	--	--
Cumulative Fund Balance (Deficit) End of Year.....	<u>\$ 67.5</u>	<u>\$ 50.4</u>	<u>\$ 39.9</u>	<u>\$ 18.0</u>	<u>\$ (47.6)</u>	<u>\$ (64.2)</u>	<u>\$ (233.9)</u>	<u>\$ 1.1</u>

NOTES:

- (a) See Table 1 for details.
- (b) Water and Sewer Rates were increased January 10, 1986 and January 1, 1991. Revenues of the Water Fund are not legally available for payment of other obligations of the City until, on an annual basis, all revenue bond debt service requirements and covenants relating to those bonds have been satisfied, and then only to the extent of \$4,994,000 per year provided certain further conditions are satisfied. The City capped this amount at \$4,138,000 per year by administrative order.
- (c) Airport revenues are not available for other City purposes.
- (d) Estimated as of March 27, 1991.
- (e) Assumes the General Fund Fiscal Year 1991 deficit will be eliminated by deficit reduction bonds. See "PROPOSED DEFICIT REDUCTION AUTHORITY" herein.

Figures may not add due to rounding.

INTERGOVERNMENTAL COOPERATION AUTHORITY

General

The Fiscal Year 1992 proposed budget assumes that the estimated ending Fiscal Year 1991 general fund deficit of \$219.4 million and the \$42 million anticipated revenue shortfall for Fiscal Year 1992 will be eliminated with the proceeds of bonds to be issued by the Intergovernmental Cooperation Authority. Under current law, the City has no legal authority to issue deficit reduction bonds.

On June 5, 1991, the Governor signed the Pennsylvania Intergovernmental Cooperation Authority Act for Cities of the First Class (Act No. 6, P.L.) (the "Intergovernmental Cooperation Act") providing for the creation of the Authority. The Intergovernmental Cooperation Act provides that the Authority has the powers, among others, (i) to issue its bonds and notes and grant or lend the proceeds thereof to the City, (ii) to exercise certain review, advisory and approval powers with respect to the City's financial affairs, including five-year financial plans required to be adopted by the City, and (iii) to withhold certain payments by the Commonwealth to the City in the event that subsequent to the issuance of bonds or notes by the Authority, the City fails to comply with certain provisions of the Intergovernmental Cooperation Act pertaining to the City's five year financial plan.

Certain conditions are imposed upon the City's access to the proceeds of the deficit reduction bonds, including the condition that the City, in consultation with the Authority, must develop (and at least annually revise) a five-year financial plan of the City, the components of which are required, among other things, to eliminate all projected deficits and balance each year's budget through sound budgetary practices. Until the City and the Authority have agreed on a five-year financial plan, the Authority shall not provide the proceeds of its bonds to the City, other than amounts necessary to enable the City to pay the principal of and interest on its bonds and lease payments securing bonds of other governmental agencies. The legislation anticipates that certain aspects of the relationship between the Authority and the City will be determined in one or more "intergovernmental cooperation agreements" to be negotiated by the City and the Authority.

Source of Payment of Proposed Deficit Reduction Bonds

The Intergovernmental Cooperation Act authorizes the City to impose a 1% sales and use tax on purchases within the City. The tax is to be imposed on the same basis as that in effect from time to time for the sales and use tax imposed by the Commonwealth, which rate is currently 6%. The City has projected that

the 1% City sales and use tax would yield approximately \$100 million annually to the City. The proceeds from the imposition of such tax will be collected by the Department of Revenue of the Commonwealth and will be remitted to the City on a periodic basis. The Intergovernmental Cooperation Act also authorizes the the City to impose a tax for the Authority. Taxes available for imposition for Authority purposes under the Intergovernmental Cooperation Act are the sales and use tax of 1%, the realty transfer tax and the wage, earnings and net profits tax on City residents. The tax selected for imposition by the City for Authority purposes is authorized by the Intergovernmental Cooperation Act to be pledged by the Authority to secure its bonds. City Council has enacted an ordinance authorizing the imposition of an Intergovernmental Cooperation Authority Tax in the form of a wage, earnings and net profits tax on City residents at the rate of 1.5% pursuant to the aforementioned grant of authority which is expected to yield revenues of approximately \$190 million annually. A concomitant reduction in the City's wage, earnings and net profits tax on residents has also been enacted by ordinance of City Council. It is not anticipated that the Authority would have significant revenues other than the proceeds of the Intergovernmental Cooperation Authority Tax. The Intergovernmental Cooperation Act requires that the proceeds of the Authority's tax in excess of amounts required for debt service on the Authority's bonds and certain other Authority payments be held by the Authority in trust for the City and remitted periodically to the City. The imposition of the Intergovernmental Cooperation Authority Tax and the use of the proceeds of the tax by the Authority in the manner described above, would reduce the amount of City revenues available for payment of City operating expenses.

Consequences of Delay of Deficit Financing

There can be no assurance that the Authority and the City will be able to execute an Intergovernmental Cooperation Agreement that will permit the Authority to issue bonds and notes and provide financial assistance to the City in sufficient time to enable the City to pay in a timely manner its operating expenses during Fiscal Year 1992. However, the Intergovernmental Cooperation Act, under certain circumstances, prohibits the City from making certain pension payments totalling approximately \$125 million which otherwise would be due by June 30, 1991. It is expected that this deferral of pension payments by the City, which could be in effect until October 1, 1991 pursuant to the Intergovernmental Cooperation Act, will assist the City in meeting its obligations during the first months of Fiscal Year 1992. Notwithstanding the foregoing, the City expects that until receipt of proceeds from the Authority's deficit bonds, it will need additional sources of interim financing.

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APPENDIX E
The City of Philadelphia —
General Information

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GENERAL INFORMATION

The Thirteenth Series Bonds are revenue bonds payable solely from moneys derived, directly or indirectly, from the Project Revenues of the Gas Works. The Thirteenth Series Bonds do not pledge the credit or the taxing power of the City of Philadelphia or create debt or charge against its tax or general revenues or create any lien against any City property other than the Project Revenues of PGW, as is more fully described elsewhere in this Official Statement. Information below regarding the City is provided in summary form for general information purposes. More complete information regarding the City and its finances can be obtained by writing the City of Philadelphia, Office of the Director of Finance, 1420 Municipal Services Building, Philadelphia, PA 19102.

The City

The City of Philadelphia was founded in 1682. In 1854, the City and County of Philadelphia were merged. In 1953 the City assumed all powers and duties of County government. Today the boundaries of the City include an area of approximately 129 square miles with a resident population of approximately 1.6 million people.

There are two principal governmental entities in Philadelphia: the City, which performs both the ordinary municipal functions and traditional county functions, and the School District of Philadelphia, Pennsylvania ("School District") which has boundaries coextensive with the City and has responsibility for all public education activities. The City is governed largely under the 1951 Philadelphia Home Rule Charter (the "Charter" or "Home Rule Charter"), which provides for the election, organization, power and duties of the legislative branch ("City Council"); the powers and duties of the executive and administrative branch; and fiscal and budgetary matters, contracts, procurement, property and records.

Elected and Appointed Officials

The Mayor is elected for a term of four years and is eligible to succeed himself for one consecutive term. Each of the seventeen members of City Council is also elected for a four-year term which runs concurrently with that of the Mayor. There is no limitation as to the number of terms which may be served by members of City Council. Of the seventeen members of City Council, ten are elected from districts and seven at large, with a minimum of two of the seven representing other than the majority party. Also elected at the same time are the Clerk of Quarter Sessions, the Sheriff and members of the Board of Elections, who are officially known as City Commissioners. Elected

at the mid-point of the term of these officials are the District Attorney and the City Controller. In performance of his Home Rule Charter-mandated pre-audit functions, the City Controller, who has a staff of approximately 150 persons, reviews each transaction involving a disbursement of City moneys. The City Controller also reviews competitive bidding, which is required for all City purchases in excess of \$2,000 except in the purchase of unique articles or services and items which for any other reason cannot be obtained in the open market.

The principal officers of the City's government appointed by the Mayor are the Managing Director, the Director of Finance, the City Solicitor and the City Representative and Director of Commerce. These officials and the Housing Director currently constitute the Mayor's Cabinet which, together with the Mayor, constitutes the major policy making group in the City's government.

The Office of the Managing Director of the City is responsible for supervising the departments and agencies of the City which render the various municipal services provided by the City. The City Representative and Director of Commerce is charged with giving wide publicity to any items reflecting the activities and accomplishments of the City's inhabitants, commerce and industry and with promoting and developing commerce and industry. The City Solicitor acts as legal advisor to the Mayor, City Council and all the agencies of the City government and heads the Law Department, established by the Charter. The Law Department is responsible for all of the City's civil litigation, the preparation and approval as to form of all of the City's contracts and bonds, and for assisting City Council, the Mayor and City agencies in the preparation of ordinances for introduction to City Council. The Director of Housing is responsible for developing an overall City housing plan for supervising the housing programs operated by the City or by delegated agencies funded by and under contract with the City.

Under the Home Rule Charter, substantially all of the financial functions of the City are placed under the Office of the Director of Finance. The Director of Finance, who is the chief financial, accounting and budget officer and is selected from three names submitted to the Mayor by a Finance Panel, is responsible for development of financial policy, development of the annual operating budget, assistance in the development of the capital budget and the capital program, supervision of the execution of the operation budget and the financial aspects of the capital budget, development and administration of the accounting system, collection of revenues through the Department of Revenue, supervision of purchasing and some aspects of property management through the Procurement Department, oversight of pension administration as Chairman of the Board of Pensions and Retirement,

development and execution of the City's program of temporary and long-term borrowing, direction of the treasury functions handled by the City Treasurer appointed by him or her and general coordination of other financial matters.

The Board of Revision of Taxes, which administers the assessment of real and personal property taxes, is appointed by the Board of Judges of the Court of Common Pleas of Philadelphia.

Governmental Services

Municipal services provided by the City include police and fire protection; health care; construction and maintenance of streets, highways and bridges; trash collection and disposal; provision for recreational programs and facilities; water and sewer systems; acquisition and maintenance of City real and personal property, including vehicles; maintenance of records; collection of taxes and revenues; purchase of supplies and equipment; construction and maintenance of airport facilities; and maintenance of the prison system. The City also owns the Gas Works, the sole gas distribution utility within the geographical limits of the City. Funding for most public assistance benefits or payments is provided by the Commonwealth and the Federal government. The City shares responsibility with the Commonwealth for costs of the Care of Dependent and Neglected Children Program and the Mental Health Program.

Local and Governmental Agencies

There are a number of significant governmental authorities and quasi-governmental nonprofit corporations which provide services within the City. These include the Philadelphia Parking Authority, the Philadelphia Municipal Authority, the Philadelphia Redevelopment Authority, the Philadelphia Housing Development Corporation, the Hospitals and Higher Education Facilities Authority of Philadelphia, the Philadelphia Industrial Development Corporation and the Philadelphia Authority for Industrial Development.

The Southeastern Pennsylvania Transportation Authority ("SEPTA"), which is supported by transit revenues and Federal, Commonwealth and local funds, is responsible for developing and operating a comprehensive and coordinated public transportation system in the southeastern Pennsylvania region. As of January 1, 1983, SEPTA's Regional High Speed Line Division assumed direct operations of the commuter rail system formerly operated under contract by Conrail.

THE ECONOMY

The Philadelphia economy is composed of a diversity of

industries. Virtually all classes of industrial and commercial businesses are represented. Philadelphia is a major business and personal service center with strengths in insurance, law, finance, health, education and utilities. The service sector has experienced substantial growth in recent years.

The cost of living in Philadelphia is relatively moderate compared to other major metropolitan areas. Along with a relatively low cost of living, Philadelphia also offers a generally lower cost for business operations. Philadelphia, as one of the country's education centers, offers the business community a large, diverse and industrious labor pool. Office occupancy rates are among the highest in the country with approximately 90% of office space occupied or committed, while the average cost per square foot for office space also compares favorably.

TABLE E-1

RENTAL RATES CLASS A OFFICE SPACE
IN \$ PER SQUARE FOOT

	<u>Average</u>	<u>Range</u>
Atlanta.....	\$21.88	\$16.50-30.00
Baltimore.....	24.00	18.00-29.75
Boston.....	33.00	19.00-41.00
Chicago.....	35.00	25.00-50.43
Dallas.....	18.80	16.31-21.28
Houston.....	16.05	12.35-31.21
Los Angeles.....	26.00	18.00-40.00
Miami.....	24.29	12.00-35.00
New York City (midtown).....	41.85	15.40-67.90
Philadelphia.....	25.00	23.00-30.00
Phoenix.....	21.52	18.00-24.50
San Diego.....	25.50	22.20-28.80
San Francisco.....	29.00	19.00-42.00

Source: Sales and Marketing Management.

Employment

Philadelphia's 1990 non-farm payroll employment represented approximately 30 percent of the metropolitan area's (Philadelphia PMSA) total employment. The employment changes within the City principally have been due to declines in the manufacturing sector and the relatively stronger performance of the service industries. Overall employment in Philadelphia has increased each year between 1980 and 1990. Due to the diversity and composition of Philadelphia's economy, the effects of large economic swings

in the national economy are often moderated on the local economy. The City's high concentration of health care, government, and educational employment and the absence of any single dominant manufacturing industry or service employer tend to make economic downturns less severe while increases in economic activity during periods of rapid national expansion also are somewhat more moderate. In recent years, the City's unemployment rates often have been below the national average.

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TABLE E-2

LABOR FORCE DATA ANNUAL AVERAGE

	<u>1980</u>	<u>1982</u>	<u>1984</u>	<u>1986</u>	<u>1988</u>	<u>1990</u>
Philadelphia (000)*						
Labor Force.....	695.0	693.2	702.7	724.1	728.9	732.4
Employment.....	634.1	621.2	637.3	673.8	686.6	688.2
Unemployment.....	60.8	72.0	65.4	50.3	42.3	44.1
Unemployment Rate (%)..	8.8	10.4	9.3	6.9	5.8	6.0
Philadelphia PMSA (000)*						
Labor Force.....	2,173.0	2,207.1	2,259.1	2,364.3	2,419.9	2,446.5
Employment.....	2,025.3	2,015.4	2,103.8	2,239.5	2,320.1	2,332.8
Unemployment.....	148.5	191.7	155.3	124.8	99.8	113.7
Unemployment Rate (%)..	6.8	8.7	6.9	5.3	4.1	4.6
United States (000,000)						
Labor Force.....	106.9	110.2	113.5	117.8	121.7	124.8
Employment.....	99.3	99.5	105.0	109.6	115.0	117.9
Unemployment.....	7.6	10.7	8.6	8.2	6.7	6.9
Unemployment Rate (%)..	7.1	9.7	7.5	7.0	5.5	5.5

* Re-benchmarked figures.

Source: Commonwealth of Pennsylvania Department of Labor and Industry, Office of Employment Security (Research and Statistics). Pennsylvania Civilian Labor Force Series by County of Residence and Pennsylvania Civilian Labor Force Series by Labor Market Area.

This is the "Households Survey". The "Employer Survey" (U.S. Dept. of Labor, Bureau of Labor Statistics, Labstat Series) shows higher Estimated Nonagricultural Payrolls. Because of the inconsistencies between these two statistical series, and the impact of benchmarking procedures on both sets of numbers, recent trends in employment require a study beyond the scope of this Appendix.

TABLE E-3

NON-FARM PAYROLL EMPLOYMENT
(Amounts in Thousands)

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Total Employment.....	743.1	752.4	755.5	762.6	738.0	738.7	729.2
Manufacturing.....	109.2	109.2	103.2	100.0	96.3	93.0	88.2
Non-Manufacturing.....	633.9	643.8	652.3	662.6	641.7	645.7	641.0
Construction.....	17.0	17.2	17.5	18.5	17.0	17.2	16.3
Transportation/Public Utilities.....	46.6	46.4	45.2	44.8	37.6	37.2	34.6
Trade.....	142.5	145.0	145.7	148.3	145.7	146.0	143.2
Finance/Insurance/ Real Estate.....	64.7	66.4	66.6	69.4	73.1	71.4	68.8
Services.....	225.0	228.5	235.9	242.3	227.9	233.6	238.6
Government.....	138.1	140.3	141.5	139.2	139.6	139.5	138.7
Other.....	N/A	N/A	N/A	N/A	0.8	0.8	0.8

Source: Commonwealth of Pennsylvania Department of Labor and Industry, Office of Employment Security (Research and Statistics).

Details may not add due to rounding.

Income

The following table shows comparable data relating to personal and per-capita income for the City and the United States.

Over the past ten years, real per-capita income has generally outpaced the urban cost of living index, suggesting that on average, the newly created services jobs have generated positive real income growth for Philadelphia wage earners.

TABLE E-4
INCOME STATISTICS

	1985	1986	1987	1988	1989
Personal Income (\$Billions)					
Philadelphia	20.45	21.39	22.30	23.94	25.47
Philadelphia SMSA (1)	73.08	77.89	83.96	91.12	97.90
United States	3,317.55	3,519.36	3,754.58	4,058.18	4,367.40
	1985	1986	1987	1988	1989
Per Capital Personal Income (\$)					
Philadelphia	12,410	12,929	13,448	14,534	15,479
Philadelphia SMSA (1)	15,253	16,106	17,191	18,519	19,750
United States	13,899	14,597	15,425	16,510	17,592

(1) The Philadelphia SMSA is comprised of the following 8 counties: Philadelphia, Chester, Bucks, Delaware, Montgomery, Gloucester, Camden & Burlington.

Source: U.S. Department of Labor, Bureau of Income Statistics

Retail Sales

The following table compares retail sales activity among the City, the City's SMSA, and the United States.

TABLE E-5
RETAIL SALES

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988*</u>	<u>1989*</u>	<u>1990*</u>
Philadelphia							
(\$ Billions)							
Durable Goods..	1.4	1.2	1.1	2.1	N/A	N/A	N/A
Non-Durable							
Goods.....	5.1	5.3	5.1	4.8	N/A	N/A	N/A
Total.....	6.5	6.5	6.2	6.9	7.4	8.7	9.1
Philadelphia PMSA							
(\$ Billions)							
Durable Goods..	8.4	9.8	11.9	11.6	11.9	12.2	12.2
Non-Durable							
Goods.....	16.0	17.3	18.0	18.8	20.0	22.1	22.9
Total.....	24.4	27.1	30.3	30.4	31.9	34.3	35.1
United States							
(\$ Billions)							
Durable Goods..	463.0	511.3	562.8	576.6	627.4	645.5	646.4
Non-Durable							
Goods.....	830.9	866.5	882.7	965.5	1,022.6	1,088.1	1,151.5
Total.....	1,293.9	1,377.9	1,445.5	1,542.1	1,650.0	1,733.6	1,797.9

Source: Wharton Econometric Forecasting Associates; for 1988-1990, U.S. Department of Commerce, Current Business Reports, BR89-R.

* The City of Philadelphia has ceased its subscription to the Wharton (WEFA) Econometric Philadelphia Model. For 1988-90, Retail Sales per WEFA has been replaced with Retail Sales per U.S. Dept. of Commerce. The two statistical series may not be exactly equivalent.

Infrastructure

The residents of the City and surrounding counties are served by a commuter transportation system operated by the South-eastern Pennsylvania Transportation Authority ("SEPTA"). This system includes two subway lines, a network of buses and trolleys, and a commuter rail network joining Center City and other areas of the City to the surrounding counties. A high speed train line runs from southern New Jersey to Center City and is operated by the Delaware River Port Authority ("DRPA"). An important addition to the area's transportation system was the opening of the airport high speed line between Center City and the Philadelphia

International Airport in 1985. The line places the airport less than 25 minutes from the Center City business district and connects directly with the commuter rail network and the site of the planned Convention Center. The opening of the commuter rail tunnel in 1984 provided a unified City transportation system linking the commuter rail system, the SEPTA bus, trolley, and subway lines, the high speed line to New Jersey and the airport high speed line.

Amtrak, SEPTA, Conrail and CSX Corporation provide inter-city, commuter, and freight rail services connecting Philadelphia to the other major cities and markets in the United States. More than 100 truck lines serve the Philadelphia area.

The final link of I-95 has been completed near the International Airport and as the Vine Street Expressway, running east and west through the central business district, and the connecting ramps to I-95, which runs north and south, are nearing completion, Philadelphia will soon have one of the most accessible downtown areas in the nation.

The City owns the Philadelphia International Airport located eight miles southwest of Center City and a smaller airport in Northeast Philadelphia. The International Airport is accessible by major highways within the City and from surrounding communities. The International Airport annually provides its 16.3 million passengers with service from nine domestic air carriers, nine commuter airlines, five foreign flag carriers, six charter airlines, and ten all-cargo carriers. USAir has hub operations in Philadelphia. A new terminal with 11 gates for both international and domestic operations has just been completed.

In 1985, United Parcel Service, Inc. (UPS) selected the Airport as its site for construction of a major East Coast hub package handling and sorting facility. This facility began operations in September 1989. More recently, the U.S. Postal Service commenced construction of a new 30-acre airmail facility at the Airport.

The City's port is the world's largest freshwater port and one of its highest tonnage ports. It is a distribution center for northeastern United States imports and is now also utilized for the cruise business as well. Port facilities can be purchased or leased in a foreign trade zone for international business. General cargo facilities, including two modern container terminals, are publicly owned and privately operated. An automobile import/export terminal further contributes to the port's economic diversity. Plans to update and modernize existing facilities are now being implemented as the Commonwealth of Pennsylvania plans to invest \$56 million to modernize and upgrade port facilities.

The water and wastewater systems of Philadelphia are owned by the City and operated by the City's Water Department. The water system provides water to the City (129 square mile service area) and a relatively smaller quantity of water to the Bucks County Water and Sewer Authority. The City obtains approximately 56 percent of its water from the Delaware River and the balance from the Schuylkill River. The water system serves approximately 503,000 households through 3,300 miles of mains and provides fire protection through more than 26,700 fire hydrants.

The wastewater system services a total of 279 square miles of which 129 square miles are within the City and 150 square miles are in suburban areas. The total population served is approximately 2,286,000, according to the 1990 census. The wastewater system contains three water pollution control plants, 16 pumping stations and approximately 2,955 miles of sewers. By order of the Delaware River Basin Commission, the City is required to achieve effluent limitations which are considered more stringent than those required to achieve secondary treatment levels as defined in the Federal Water Pollution Control Act Amendments of 1972, as amended.

Philadelphia Gas Works ("PGW") is owned by the City and stores, processes and distributes, as sole supplier, gas within the entire 129 square mile area of the City. PGW is managed by the Philadelphia Facilities Management Corporation. Rates and charges are fixed by the Gas Commission, established under the Home Rule Charter.

The City is responsible for collecting solid wastes from sources other than industrial or commercial institutions. Approximately 3,200 tons of solid waste per day are collected by the City. Municipal solid waste is disposed of at various landfills operated outside City limits. The City has entered into a contract with a major private contractor for landfill space.

Some elements of the City's capital plant are aged and in need of repair, maintenance and/or reconstruction. The City Planning Commission's recommended capital improvement program for 1991-96 addresses this need. The City's capital improvement requirements are dictated by the need to provide services and maintain the existing infrastructure. Rebuilding the City's infrastructure is the first priority. New projects have been recommended only if they enhance the City's economy, protect public health and safety, improve the City's neighborhoods, make government more efficient, leverage other government and private funds or preserve unique resources. Examples consistent with these priorities are projects such as the construction of the new International Terminal at the Philadelphia International Airport, the improvements at the Port, upgrading police and fire facilities, improvement of housing services, libraries, health facilities,

the transit system, and numerous projects to enhance the City's industrial and commercial development. Also included in the capital improvement program are projects for the City's museums, recreation facilities, and parklands.

Housing

Philadelphia boasts a diversity of neighborhoods and housing opportunities. There are over 100 neighborhoods, some of which trace their origin to the eighteenth century and the early settlements of Philadelphia. Approximately 60 percent of the City's housing units are owner-occupied.

Housing costs are relatively lower than in many other metropolitan areas, with the City offering a wide spectrum of residential possibilities. Perhaps the major factor in Philadelphia's low Consumer Price Index ("CPI") is the comparatively inexpensive cost of housing in the City.

TABLE E-6

HOUSING AFFORDABILITY IN MAJOR CITIES

<u>City</u>	<u>Percentage*</u>
San Diego.....	37.9%
Los Angeles Area.....	36.9
New York City Area.....	36.3
San Francisco Bay Area.....	35.4
Dallas-Ft. Worth.....	29.9
Atlanta.....	29.3
Boston Area.....	28.9
Baltimore.....	28.9
Houston Area.....	28.2
Washington.....	27.7
Philadelphia Area.....	27.4
Chicago Area.....	26.7
Phoenix.....	26.4
Detroit-Ann Arbor.....	25.3
Kansas City.....	23.2
Miami-Ft. Lauderdale.....	23.8
Cleveland Area.....	21.9
St. Louis.....	20.3
U.S. Average.....	30.7

* Represents the percent of average income in each market needed for payments on an average conventionally financed home.

Source: U.S. Housing Markets/The Lomas & Nettleton Co.

Real Estate

While the City's housing market has remained fairly stable, there has been significant development in the commercial real estate sector. The tables below summarize certain information concerning real estate assessments and construction activity.

TABLE E-7

CONSTRUCTION AUTHORIZED BY BUILDING PERMIT

Declared Valuation
(Millions of Dollars)

	<u>Residential</u>	<u>Commercial</u>	<u>Other(a)</u>	<u>Total</u>	<u>New Housing Units</u>
1980	116.2	147.0	372.2(b)	635.4	2,704
1981	99.1	176.9	151.9	427.9	2,060
1982	88.0	122.7	166.9	377.6	1,768
1983	56.6	140.2	125.8	322.6	1,152
1984	66.7	213.3	261.7	541.7	1,498
1985	147.7	352.1	91.7	591.5	3,027
1986	113.6	252.6	264.6	630.8	2,569
1987	98.0	427.0	118.3	643.3	1,561
1988	163.4	765.8	98.5	1,027.7	2,981
1989	104.9	434.9	118.7	658.5	1,496

(a) Includes construction by government, medical and educational units.

(b) Major projects were undertaken by the City Water Department, the Community College, the City (Commuter Tunnel) and various hospitals.

Source: City of Philadelphia, Department of Licenses and Inspections.

TABLE E-8

TEN HIGHEST CERTIFIED MARKET AND ASSESSMENT VALUES
FOR TAX YEAR 1991 OF FULLY TAXABLE PROPERTIES

<u>Location</u>	<u>1991 Certified Market Value</u>	<u>1991 Certified Assessment Value</u>
1500-42 Market Street.....	\$240,790,000	\$77,052,800
1650 Market Street.....	192,128,000	61,480,960
2005 Market Street.....	133,972,600	42,871,232
1600-22 Market Street.....	115,000,000	36,800,000
1414-38 South Penn Square.	113,537,800	36,332,096
1700-40 Market Street.....	105,000,000	33,600,000
1835 Market Street.....	104,425,900	33,416,288
1101-11 Market Street.....	93,300,000	29,856,000
1801-21 Market Street.....	88,366,100	28,277,152
124-48 South 6th Street...	85,000,000	27,200,000

Source: City of Philadelphia, Board of Revision of Taxes.

TABLE E-9

TEN HIGHEST CERTIFIED MARKET AND ASSESSMENT VALUES
FOR TAX YEAR 1991 OF REAL ESTATE TAX ABATED PROPERTIES

	<u>1991 Certified Assessment Market Value</u>	<u>Taxable Assessment Value</u>	<u>Exempt Assessment Value</u>
50 South 16th Street.....	\$145,328,800	\$11,391,040	\$35,114,176
4301 Byberry Road.....	143,776,000	9,474,493	36,533,827
1717 Arch Street.....	140,400,000	7,471,488	37,456,512
1735 Market Street.....	126,297,200	6,675,712	33,739,392
1901-19 Market Street.....	110,150,000	1,108,332	34,139,668
701-39 Market Street.....	100,000,000	3,400,000	28,600,000
1818-28 Market Street.....	92,128,800	28,256,911	1,224,305
1301-25 Chestnut Street.....	74,000,000	15,904,000	7,760,000
200 South Broad Street.....	71,343,750	6,358,815	16,471,185
100-20 North 18th Street....	69,187,400	3,649,536	18,490,432

Source: City of Philadelphia, Board of Revision of Taxes.

LITIGATION AND OTHER MATTERS

The following discussion concerning claims against the City, prepared by the Law Department of the City, does not include litigation concerning the Gas Works, nor does it include litigation concerning the School District, which is a separate governmental entity. A discussion of litigation involving the Gas Works is set forth in the section entitled "LITIGATION" included in the forepart of this Official Statement.

The City is represented in its litigation by the City Solicitor and her staff which comprise the Law Department. The Law Department does not represent the Gas Works or the School District; however, the Law Department acts on behalf of the City and the School District in respect of matters arising from the selection of subjects of taxation and rates of taxation by City Council and collection of taxes by the City for the School District.

Generally, judgments and settlements on claims against the City are payable out of the General Fund, except for claims against the Water Department and the Aviation Division. Claims against the Water Department are paid first from the Water Fund and only secondarily from the General Fund which is then reimbursed by the Water Fund. Claims against the Aviation Division, to the extent not covered by insurance, are paid first from the Aviation Fund and only secondarily from the General Fund. The Act of October 5, 1980, P.L. 693, No. 142, known as the "Political Subdivision Tort Claims Act," establishes a \$500,000 aggregate limitation on damages arising from the same cause of action or transaction or occurrence or series of causes of action, transactions or occurrences with respect to governmental units in the Commonwealth such as the City. The constitutionality of that aggregate limitation has been repeatedly upheld by the Pennsylvania Supreme Court. In February 1987, an appeal of that decision to the United States Supreme Court was dismissed for want of jurisdiction.

General Litigation

Various claims have been asserted against the City from time to time, and in some cases suits thereon have been instituted. Many of these claims are reduced to judgment or are otherwise settled in a manner requiring payments by the City. As of June 19, 1991, the estimate of the aggregate loss for Fiscal Year 1991 which has resulted from these claims and lawsuits, and which will be paid out by June 30, 1991, is approximately \$37 million. Currently being litigated, in addition to the general litigation, are the special litigation matters below-referenced. Excluding claims against the City Water Department, which are discussed in the special litigation section, the City's proposed budget for

fiscal year 1992 contains a reserve for general and special litigation claims in the amount of \$38 million. Actual claims paid out for such litigation averaged \$20.1 million in the past five fiscal years.

Included among these claims are several actions involving catastrophic injuries. The potential exposure in many of these cases is well in excess of \$500,000, and in certain of these cases the City may be liable in such amounts, notwithstanding the \$500,000 limitation on cases brought under the Political Subdivision Tort Claims Act mentioned above. A City ordinance dated December 4, 1990 (the "Governmental Immunity Ordinance"), provides that (1) persons allegedly injured by the negligence or misconduct of a City employee, whether or not such employee is a police officer, will retain the right to seek recovery against the City only if the alleged unlawful conduct falls within one of the eight waiver areas set forth in the Political Subdivision Tort Claims Act and (2) if the Act is applicable, the City will be subject to damage liability of not more than \$500,000. The retroactive application of the Governmental Immunity Ordinance is currently the subject of litigation. The conduct of a City employee remains actionable under federal civil rights laws regardless of the provisions of the Political Subdivisions Tort Claims Act or the Governmental Immunity Ordinance.

Special Litigation

Adverse determinations in the following matters could negatively affect the results of operations in Fiscal Years 1991 and 1992.

On January 3, 1991, FOP, Lodge No. 5 and Local 22 of the Philadelphia Firefighters Union filed suit against the Philadelphia Board of Pensions and Retirement and the City seeking to preclude the Board from considering or voting upon participation in the contemplated temporary loan note sale. (*Lodge #5 FOP v. Philadelphia Board of Pensions and Retirement*, No. 215 C.D. 1991). The Plaintiffs assert that the members of the Board have a conflict of interest which disqualifies them from voting on the City investment since they are also City employees; that investment in City obligations is an inherently speculative and risky investment; that the ordinance providing for investments in City obligations is procedurally defective, and that the proposed sale violates the union's existing collective bargaining agreements with the City and the provision of Act 205 requiring payment of the City's minimum obligations to the fund. Plaintiffs sought a temporary restraining order, and a motion for change of venue and/or appointment of an out-of-county judge. All motions were denied. This case has been appealed to Commonwealth Court. Plaintiffs have also filed a petition with the Pennsylvania Supreme Court requesting that the court either assume jurisdiction

over the entire matter, or appoint an out-of-county judge or grant a change of venue for the case. The temporary loan notes have since been sold and repaid, and the City contends that the litigation is therefore moot.

On October 31, 1990, the City, without admitting liability, entered into a preliminarily approved settlement agreement (the "Agreement") regarding the request of certain plaintiffs for the refund of a portion of their payments of the City realty transfer tax (*Haas, et al. v. Philadelphia Department of Revenue*, October Term, 1989, No. 7152). In accordance with the Agreement, approximately \$19.8 million remains to be paid by the City to persons (i.e., the "plaintiff settlement class") who paid the City realty transfer tax at the rate of 4.07% rather than 2.50% with respect to a transaction taxable during the period July 1, 1988 to June 30, 1989, inclusive. The approximate sum of \$19.8 million was agreed to be paid to the plaintiff settlement class in the following manner: (i) \$5 million within 2 days of the Court's final approval of the Agreement or June 27, 1991, whichever is earlier; (ii) \$10 million or 40% of the settlement amount, whichever is greater, on or before August 12, 1991; and (iii) the remainder of the settlement amount on or before August 12, 1992.

On December 26, 1985, the City was served with a complaint alleging sex discrimination in its employment practices. The suit was filed in the U.S. District Court for the Eastern District of Pennsylvania (*District Council 33 et al. v. City of Philadelphia*, C.A. No. 85-7418) by District Council #33 and ten individual City employees. On August 14, 1986, the City's motion to dismiss the complaint was denied. On January 20, 1988, a class of all job classifications in civil service which are female dominated was certified and discovery has begun. The plaintiff class seeks revision of the City's pay evaluation system and back pay to any female dominated job classification in which discrimination is found.

On August 6, 1990, the City was served with a complaint captioned *Bradley, et al. v. Goode, et al.* (August Term, 1990, No. 194) which was filed in the Philadelphia Court of Common Pleas. The plaintiffs, the Municipal Court, the Traffic Court and the Clerk of Quarter Sessions, all of Philadelphia, are seeking increased funding from the City for local court and clerk operations. The City has filed an answer to the complaint. The potential aggregate liability of the City, should it lose this case, is approximately \$16.2 million. The plaintiffs have taken no action to pursue this matter other than to file the complaint.

On October 23, 1989, a complaint was filed against the City in the Court of Common Pleas (*Temple University v. City of Philadelphia*, October Term, 1989, No. 4518). The plaintiff is

seeking declaratory and injunctive relief which would require the City to pay for emergency and non-emergency inpatient and outpatient hospital care rendered by Temple University Hospital to indigent City residents. The plaintiff is seeking to recover expenses for free care allegedly provided by it, and the City may incur substantial liability should it lose this case because of the possibility that other hospitals will file similar suits. The Commonwealth of Pennsylvania has been joined as a defendant. The City's preliminary objections have been denied and the City has answered, denying all allegations. A motion to transfer the case to Commonwealth Court is pending.

On June 4, 1990, a suit was filed against the City in the Philadelphia Court of Common Pleas encaptioned *Rizzo, et al. v. City of Philadelphia, et al.*, June Term, 1990, No. 155. This taxpayer and class action suit seeks to recoup money allegedly charged by the City Fire Department through its Emergency Medical Service Division for emergency medical services rendered, such as ambulance transportation and first aid treatment, and to enjoin further alleged illegal charges. The City may incur approximately \$9,000,000 in liability should it lose this case. The City's preliminary objections to the plaintiffs' complaint were denied and pretrial proceedings are underway.

On November 21, 1989, an Act 111 interest arbitration panel awarded the City of Philadelphia Police Department a new shift schedule for uniformed employees represented by the Fraternal Order of Police, Lodge No. 5. As a result of the award, police officers began working a new schedule effective January 5, 1990. As a result of the new schedule, officers who previously worked 2,085 hours spread out over 260 8-hour workdays, now work 253 8 1/4-hour days. On January 9, 1990, the FOP filed a grievance asserting that police officers are entitled to 15 minutes additional pay per day on an overtime basis under the new 8 1/4-hour schedule. (*Lodge #5 FOP v. City of Philadelphia, #14-390-0375-90J(AAA)*) The City asserts that there is no requirement to pay any additional compensation since the new basic schedule awarded by the panel provided for officers to work fewer days and fewer hours per year. The matter was scheduled for binding arbitration on October 9, 1990 under grievance procedures in the parties' collective bargaining agreement. However, the arbitration was postponed until further notice. The City's exposure if the FOP were to prevail would be approximately \$5 million per year for police personnel costs.

On January 8, 1990, plaintiffs, the owners of and investors in two failed after hours dance hall clubs, filed a complaint in United States District Court for the Eastern District of Pennsylvania against the City of Philadelphia, various City department and certain City employees alleging that the City intentionally discriminated against them on the basis of race in

violation of Section 1981 of the Civil Rights Act of 1866 and violated their procedural and substantive due process rights under Section 1983 of the Civil Rights Act of 1871, and that such actions of the City, et al., constituted an unconstitutional taking of property (*Midnight Sessions, Inc., et al. v. City of Philadelphia*, C.A. 90-0132). The City prevailed after a jury trial on the Section 1981 count; plaintiffs prevailed on their remaining claims, and the jury awarded the plaintiffs \$2,553,000 and \$552,000, respectively. On January 2, 1991, the trial judge granted the plaintiffs' motion to require the City to post a bond in the amount of the judgment plus interest and costs. The City has posted bond. The court denied the City's post trial motions and the City has appealed to the United States Court of Appeals for the Third Circuit.

In April 1988, five police detectives, one female and four males, filed in federal court a complaint against the City and Police Department ranking officers concerning their transfers from the Homicide Division (*Keenan v. City of Philadelphia, et al.*, C.A. No. 88-7156). The Complaint alleged sex discrimination and violations of the First Amendment. In January 1990, a jury in the United States District Court for the Eastern District of Pennsylvania returned a verdict against the City for \$2.4 million in compensatory and punitive damages. The City filed post-verdict motions and the trial judge reduced the punitive part of the verdict by 1/3 and granted attorneys' fees of \$1.17 million, for a total judgment against the City of \$3 million. The City has appealed to the United States Court of Appeals for the Third Circuit.

On May 13, 1985, when City Police were attempting to serve warrants on members of the radical organization known as "MOVE", a fire occurred which destroyed approximately sixty (60) homes and caused damage to numerous others and resulted in loss of lives. The City has rebuilt the destroyed homes, repaired the damaged homes and resolved many property damage claims. As of this date, four active cases are pending in federal district court (In re City of Philadelphia Litigation, U.S. District Court, Master File No. 85-2745). These cases include: a class action, filed on behalf of all persons (except MOVE members) who lived in the sixty homes and sustained damage as a result of the fire and have not yet reached settlement with the City; two suits by the administrators of the estates of deceased adult residents of the MOVE house, and one suit disputing prior settlement. All of these actions seek compensatory and punitive damages in an unspecified amount in excess of \$75,000, in addition to attorneys' fees and costs, for claimed violations of federal constitutional law and state law. Since more than six years have now passed from the date of the incident, the City does not expect any more suits to be filed. While participating fully in relief efforts, the City also intends to defend vigorously all claims

asserted in the described suits. The litigation involving one surviving MOVE house resident has recently been settled at a cost to the City of \$1.6 million, which has been paid.

On December 19, 1985, plaintiffs' decedent, Samuel Agresta, was shot and killed by officers of the Philadelphia Police Department after a high speed motor vehicle chase. Agresta's widow instituted a wrongful death and survival action on behalf of herself and her two children in the Philadelphia Court of Common Pleas (*Agresta v. City of Philadelphia, et al.*, March Term, 1987, No. 851). This case has now been tried and the jury has returned a verdict against the City in the amount of \$1.8 million on the wrongful death claim and \$3 million on the survival action. Plaintiffs are expected to request that delay damages be added to the above aggregate amount. The City will file post-trial motions and appeal the above verdict citing substantial evidentiary error and its contention that this action is barred by the Governmental Immunity Ordinance discussed above. It should be further noted that Agresta's parents and brother have filed civil rights actions in the United States District Court for the Eastern District of Pennsylvania (*Agresta v. City of Philadelphia, et al.*, Civil Action Nos. 86-7358 and 87-8308). These federal court actions have been consolidated and are scheduled for trial in the fall of this year. The Plaintiffs have not as yet advanced a specific demand for damages.

In October 1990, the representative of two children killed in a fire in a foster home filed suit against the City, alleging that the Department of Human Services and individual social workers violated the civil rights of the deceased children by its deliberate indifference in the placement of these children in a certain foster home. After removing the case to United States District Court for the Eastern District of Pennsylvania (*Jones v. Department of Human Services*, C.A. No. 90-7522), the City filed an answer to the complaint, denying all of the allegations. Discovery is ongoing.

In April, 1990, a putative class action was filed in U.S. District Court for the Eastern District of Pennsylvania against the Commonwealth and the Philadelphia Family Court in the case of *Baby Neal v. Casey, et al.*, C.A. No. 90-2343. The plaintiffs are alleging that their federal statutory and constitutional rights are being violated because they are not receiving proper child welfare services. The putative class includes children who are both in foster care and at home. The relief sought is the provision of various child welfare services. After lengthy negotiations failed, the City was joined as a defendant in July 1990, and the City filed an answer, affirmative defenses, and cross-claim (against the state defendants) on July 27, 1990. Settlement negotiations between the plaintiffs and the City and Commonwealth are ongoing. Discovery is proceeding. Currently

pending before the court is the plaintiffs' motion for class certification, which both the Commonwealth and the City defendants have opposed.

In December 1989, the representative of a child killed while in foster care filed an action in United States District Court for the Eastern District of Pennsylvania (*Richardson v. City of Philadelphia et al.*, C.A. No. 89-8901) against the City, the Department of Human Services, and several individual defendants, asserting civil rights violations and negligence arising from the death of a child in a fire that occurred in a foster home. The City has filed an answer, denying the allegations in the complaint. Upon completion of discovery, which is proceeding currently, the City intends to file a motion requesting that summary judgment be entered in its favor.

In 1988, representatives of a child killed while in foster care filed a suit against the City and certain private provider agencies in United States District Court for the Eastern District of Pennsylvania (*Campbell v. City of Philadelphia*, C.A. No. 88-6976), alleging that the City's Department of Human Services was negligent and violated the child's civil rights by not protecting the child from the foster mother. Damages claimed will probably be in excess of \$1 million. Currently the court has stayed a decision on the City's motion for reconsideration of the court's denial of the City's motion for summary judgment, pending decision on the co-defendants' motion for reconsideration, had been scheduled for oral argument in May 1991 but which has been continued by the court, and not yet rescheduled.

In 1986, a complaint was filed against the City in United States District Court for the Eastern District of Pennsylvania (*McLaughlin v. City of Philadelphia*, 693 F.Supp. 318 (1988)) challenging the City's decision to remove a child from the care of the plaintiff foster parents allegedly because of the race of the plaintiffs. In 1988, the court issued an injunction ordering the City to make plans to return the foster child to the care of the plaintiffs. The City has complied and the plaintiffs currently have physical custody of the child. However, there is a damage issue remaining in this case in which the plaintiffs are seeking in excess of \$1 million. Settlement negotiations are in progress.

In 1971 a complaint was filed against the City in the Philadelphia Court of Common Pleas which alleged that the City was violating the constitutional rights of the plaintiffs by imprisoning them in overcrowded and deficient prison facilities (*Jackson v. Hendricks*, February Term, 1971, No. 2437). Remedies requested included expanded prison facilities, as well as increased staff and repairs to existing facilities. By Order dated July 27, 1990, the Jackson court determined that the City failed

to comply with an August 4, 1988 court approved Consent Decree and subsequent Order and held the City in contempt of court. Daily fines which were then being assessed against the City in the amount of \$5,000 were increased to \$20,000 as of July 27, 1990. On July 30, 1990, the City filed a Notice of Appeal to the Superior Court. The Notice of Appeal halted the assessment of fines pending the outcome of the appeal. On August 15, 1990, the City filed post trial motions with the Philadelphia Court of Common Pleas. The City's post trial motions were denied and the City is awaiting a briefing schedule from the Superior Court. The City is currently negotiating the terms of a consent decree which, upon approval by the court, would require the City to make certain additions and repairs to existing facilities as well as to observe staffing limits. The consent decree could also affect the level of aggregate fines. In the event the City is unable to enter into a Consent Decree, or is unsuccessful on appeal, the City will be subject to fines of \$20,000 per day from July 27, 1990 until the City comes into compliance.

On April 30, 1982, inmates of the Philadelphia prison system filed a pro se complaint in the United States District Court for the Eastern District of Pennsylvania alleging that the overcrowded conditions in the Philadelphia prison system violated their federal constitutional rights. The district court appointed counsel to represent the plaintiff class on November 12, 1983. (*Harris, et al. v. Reeves, et al.*, C.A. No. 82-1847). In December 1990, in order to facilitate the settlement of the litigation, the City and counsel for the plaintiffs entered into a Stipulation and Agreement which will take effect upon final court approval. The Stipulation has two essential parts - one for long-term relief of prison overcrowding and another for short-term relief of prison overcrowding. The long-term relief provides for a prison planning process that includes the construction by the City of a new 1,000 bed prison facility and the closing or renovation of existing prison facilities. The short-term relief provides that the maximum allowable prison population ("MAP") not exceed 3,750 inmates and provides for an accelerated release mechanism for pretrial detainees. Pursuant to the release mechanism, the City must submit to the court names of 35 pretrial detainees per day, five days per week whenever the MAP is exceeded. The Stipulation and Agreement also provides sanctions in the event the City fails to comply with its terms and conditions. If the City fails to substantially comply with the prison planning process, the City will be fined \$500 per day for the first 30 days and \$1,000 per day thereafter until the City is in compliance. However, the City will be allowed a reasonable extension of time for unavoidable delays due to causes not reasonably foreseeable and entirely beyond the control and without the fault or negligence of the City. In addition, the Stipulation and Agreement has a provision for the City to be fined \$100 per day for each inmate admitted into the prison in

violation of the release mechanism when the MAP is exceeded. However, this provision only applies if the City does not list 35 names per day.

Between 1989 and 1990, several suits were filed in the United States District Court for the Eastern District of Pennsylvania (C.A. No.s 89-7922; 89-8571; 90-1940; 90-2947; 90-2948; 90-3336; 91-1082) against the City arising out of a riot at Holmesburg Prison on October 28, 1989. Together, these suits involve at least 117 potential plaintiffs. All such suits allege injuries from excess use of force by guards when they regained control of the prison. Damages include treatment costs, punitive damages, attorneys fees and costs to improve prison facilities. The City has answered all of the complaints and believes that it can prove that the force used was justifiable and that the City is not liable for the damages claimed. However, the City's aggregate potential liability in these cases is well in excess of \$1 million. The cases are in the discovery phase.

On May 30, 1991, the District Attorney of the City filed a petition in the Commonwealth Court of Pennsylvania alleging that the Commonwealth, the City, and others were avoiding their legal duties in failing to incarcerate pre-trial prisoners (*Abraham, District Attorney for the City and County of Philadelphia v. The Department of Corrections of the Commonwealth of Pennsylvania, et al.*, No. 0166 M.D. C.D. 1991). The requested relief includes: (1) a declaratory judgment clarifying the legal obligations of the respondents in respect of the above-referenced matter; and (2) a mandatory injunction compelling the respondents to provide for alternative detention facilities sufficient to house all pre-trial prisoners, subject to the limitations imposed on the respondents in *Harris v. Reeves*, discussed above, and to compel the Commonwealth to provide sufficient funding to the City to enable the City to provide alternative detention facilities. The City is preparing an answer to the petition.

On October 10, 1989, a complaint was filed against the City, and certain officials of the City in the Court of Common Pleas, Philadelphia County, by persons alleged to be taxpayers of Philadelphia, and various organizations alleged to be representing taxpayers (*Weiner, et al. v. City of Philadelphia, et al.*, October Term, 1989, No. 1575). The plaintiffs, in reaction to the City's plan to construct a convention center in Philadelphia, are challenging the validity of a Lease and Service Agreement between the City, as lessor, and Pennsylvania Convention Center Authority (the "Authority"), as lessee. The Authority was created pursuant to state law and given broad powers, by itself or in agreement with others, to develop, finance, construct, maintain, operate and lease convention centers within the Commonwealth. The plaintiffs also challenge the validity of the City Ordinance (Bill No. 533, June 29, 1989) which authorizes the City to enter

into the Lease and Service Agreement. The plaintiffs contend that the Lease and Service Agreement and the Ordinance are violative of state law and the City's Home Rule Charter, respectively. In Counts I and II of the complaint, plaintiffs complain that the Service Fee to be paid by the City to the Authority under the Lease and Service Agreement, which includes an amount sufficient to enable the Authority to make payment of the annual debt service on the bonds issued by the Authority to finance the construction and development of the convention center, constitutes an impermissible debt of the City. The plaintiffs further complain in Count III of the complaint that, notwithstanding legislation authorizing the financing and construction of the convention center, this matter should first have been submitted to a public referendum. The plaintiffs are seeking a declaratory and injunctive order from the Court which would declare the Lease and Service Agreement null and void and preclude the City from performing its obligations under the Lease and Service Agreement. The City contends that the Service Fee does not constitute debt of the City under applicable state law and, with respect to Count III of plaintiffs' complaint, the City contends that it has complied with applicable state law and the City's Home Rule Charter in enacting Bill No. 533 and that no public referendum was required prior to the Bill's enactment. The City has filed preliminary objections to the complaint and has requested the Court to dismiss the complaint for failure to state a cause of action. On May 24, 1990, the Court granted the City's preliminary objections and dismissed the Complaint. The plaintiffs have since appealed to the Supreme Court of Pennsylvania, which has accepted jurisdiction.

In 1983, the City enacted an ordinance which increased the rate of tax for the Philadelphia net profits tax. Since that time, certain taxpayers, whose business entities have non-resident partners, have alleged that the imposition of the net profit tax upon such non-residents of the City at a rate of 4.96% violates a rate cap established by state law. The City contends that the rate cap imposed by state law does not apply to the increased net profits tax and/or is invalid due to non-uniform treatment of resident and non-resident partners. All cases concerning these issues are pending before or are being appealed to the Tax Review Board, an administrative hearing panel. As such, those business entities that have paid the increased tax are seeking refunds of any money paid beyond the alleged legal rate of tax while those business entities who have not paid such tax are appealing the deficiency assessments of the City. The total amount in controversy, including any applicable interest due on refunds and unpaid assessments under appeal, is approximately \$3 million. Settlements have been negotiated with some of the business entities with appeals before the Tax Review Board. The amounts of the agreed upon settlements to date are

some \$750,000 to be paid in the form of credits against future tax liability.

The following environmental matters are currently being litigated:

Amtrak filed an amended third-party complaint naming the City as a third-party defendant in a suit instituted in the United States District Court for the Eastern District of Pennsylvania (*U.S. v. SEPTA et al.*, E.D. Pa., C.A. No. 86-1094) by the United States Environmental Protection Agency ("EPA") against Amtrak, Conrail, Monsanto Company and SEPTA, for clean-up of PCB's at the site known as the "Paoli Yard" located in Chester County, Pennsylvania. The Paoli Yard was recently placed on the National Priorities List (i.e. the "Superfund" List). EPA is not expected to announce an estimated PCB cleanup cost before the end of 1991. However, at the outset of this litigation, SEPTA estimated such cost to be approximately \$30 million. The City denies any responsibility for the Paoli Yard pollution. In addition, the City has been named as a defendant or third party defendant in at least 65 private suits for damages and equitable relief, involving over 258 individual plaintiffs, now pending in the Court of Common Pleas, Philadelphia County (*In re: Paoli Railroad Yard PCB Litigation*, CCP, Philadelphia County, Master Dockets, January Term, 1990, No. 1046), and in one private suit pending in the Court of Common Pleas, Chester County (*Stewart v. SEPTA, et al.*, CCP, Chester County, No. 87-02291) based upon the same alleged site pollution. The City's motion for summary judgment in the *Stewart* case was granted by Order and Opinion dated October 31, 1990, which were not appealed. The motion asserted that all of the plaintiffs' claims were barred by the Pennsylvania governmental immunity statute. The Philadelphia Court of Common Pleas approved a joint petition of the defendants to transfer venue to Chester County in all pending cases, which decision has been affirmed by the Commonwealth Court of Pennsylvania. The plaintiffs have petitioned the Pennsylvania Supreme Court for Allowance of Appeal from the Commonwealth Court decision, which the City has joined all co-defendants in opposing. Pending resolution of appeals, the cases remain subject to a Case Management Order of the Philadelphia Court of Common Pleas which bars filing of motions for summary judgment. The City denies any liability in these private suits and will move for summary judgment in all cases transferred to Chester County.

In November 1988, the United States District Court for the Eastern District of Pennsylvania granted partial summary judgment for all defendants including the City, on personal injury claims in 21 private law suits involving 38 plaintiffs, arising out of the pollution alleged at the Paoli Yard. (*In re Paoli Railroad Yard PCB Litigation*, Master File 86-2229). This

decision was appealed to the United States Court of Appeals for the Third Circuit, which by decision dated September 30, 1990, reversed and remanded. The Third Circuit refused to rehear the matter *en banc*. The United States Supreme Court has denied a petition of the City and all co-defendants for a Writ of Certiorari to review the judgment of the Third Circuit Court of Appeals with respect to the authority of the District Court to reject certain expert testimony and the federal court's assertion of a new tort cause of action for "medical monitoring". In three additional cases involving four plaintiffs arising out of the same site pollution and included in the same Master File (but not presenting any personal injury claims), the City has moved for summary judgment.

The City has been named as a defendant in two suits for damages in the Court of Common Pleas of Philadelphia County regarding the Clearview site, a landfill located just beyond the City limits in Delaware County, Pennsylvania (*Smalls et al. v. Korman Corp. et al.*, CCP, Philadelphia County, April Term, 1985, No. 633 and January Term, 1986, No. 781). The suits were brought in April 1985 and January 1986, respectively, by approximately 100 nearby Philadelphia residents who allege that the City is liable for the alleged adverse impact on area property values due to the City's role in the area's planning and development. The site has not been declared a hazardous site by either federal or state agencies. The cases have been assigned to a judge and are in discovery phases. The City believes that it has very strong defenses, including immunity under state law against certain types of claims which are alleged by the lawsuits. A motion for summary judgment will be filed once discovery is completed.

On March 20, 1990, however, the United States District Court dismissed the federal charges under the Clean Air Act and remanded the case to the Court of Common Pleas. The City has denied all liability.

In October 1988, the EPA served upon the City three complaints alleging violations of the Toxic Substances Control Act (*United States Environmental Protection Agency v. City of Philadelphia. et al.* Docket No. TSCA III, No. 361, et al.) The complaints arise out of a December 1987 inspection of transformers in certain City buildings and the City's alleged failure to comply with PCB reporting and labeling requirements. It has been proposed that the City pay approximately \$214,000, consolidating all three complaints, as penalty for the alleged violations. In July 1989, EPA served upon the City a fourth complaint alleging violation of the Toxic Substances Control Act. This complaint arose out of a December 1987 inspection of certain facilities at the Philadelphia International Airport and the City's alleged failure to comply with PCB reporting and labeling requirements. It has been proposed that the City pay approximately \$740,000 as

penalty for this fourth set of violations, for a total of \$954,000 in proposed penalties. Settlement negotiations are currently in progress involving all four complaints which have been consolidated. A settlement range of \$100,000 - 200,000 is reasonably probable.

In November 1990, the City was named as one of 265 third-party defendants by thirteen defendants in two suits brought in the United States District Court for the District of New Jersey by EPA and the New Jersey Department of Environmental Protection (*U.S. v. Helen Kramer, et al.*, Civil No. 89-4340(G) and *State of New Jersey v. Almo Anti-Pollution Services Corp., et al.*, Civil No. 89-4340(G)), alleging the right to past and future response cost recovery under Section 107(c) of the Comprehensive Environmental Response, Compensations and Liabilities Act (CERCLA), known as the "Superfund Law," 42 U.S.C. 9607 (a), for expenses incurred or to be incurred for the remediation and clean-up of the Helen Kramer Landfill Site, Mantua Township, New Jersey, which is ranked fourth on the Superfund List. These two actions have been consolidated by the court for case management purposes. EPA has awarded a \$55.7 million contract to IT Corporation for the remediation activities at the site and has past cost claims of approximately \$7 million. In response to information requests from EPA, the City has indicated that its wastes delivered to the site consisted solely of municipal solid waste and municipal incinerator residue, neither of which are deemed to be hazardous by the City. The City is vigorously defending these cases on the basis of its belief that the waste it sent to the Helen Kramer Landfill was not hazardous. Discovery is ongoing.

In June 1987, SEPTA instituted an action against the City and Urban Engineers, a private engineering firm, asserting that one or both of the defendants were responsible for the removal of loose asbestos alleged to be present as insulation on pipes located in certain tunnels beneath the Suburban Station railroad station. The suit brought in the Court of Common Pleas of Philadelphia County (*SEPTA v. Urban Engineers and the City of Philadelphia*, June Term 1987, No. 5781) alleges that the subject tunnels were incorporated into the ventilation system for an underground rail link, known as the Center City Commuter Tunnel, constructed by the City. Because of the presence of asbestos, the ventilation system has not been put into operation. The cost of asbestos removal is alleged by SEPTA to be in excess of \$3 million. The City denies any liability in the matter and disputes the alleged cost of removal. The case is in the discovery phase.

In November 1989, the Environmental Protection Agency filed a complaint against the City in the United States District Court for the Eastern District of Pennsylvania (*United States of America v. Aluminum Company of America; City of Philadelphia, et*

al., Civil Action No. 89-7421) ("Moyer's Landfill Case") pursuant to CERCLA. The site, located in Montgomery County, Pennsylvania, is the former Moyer's landfill. Currently there are seventeen other defendants named in the complaint. The EPA has estimated the cost of cleanup at \$28 million. After adding various appurtenant costs as well as cost over-runs, the City believes the outside cost might be as high as \$40 million. The City was named as a defendant because it shipped incinerator residue to the site. The City is seeking dismissal from the case based upon the fact that the residue does not meet the definition of a hazardous substance pursuant to the Superfund Law. Discovery is ongoing.

In May 1989, a former City ash-hauler filed suit against the City in the Court of Common Pleas of Philadelphia County, (*Joseph Paolino & Sons, Inc. v. City of Philadelphia*, May Term, 1989, No. 5762). The plaintiff alleged causes of action for breach of contract and unjust enrichment/quantum meruit, claiming that the City refused to pay approximately \$630,000 under an ash-hauling requirements contract. Plaintiff is demanding this amount plus interest and costs. The City filed preliminary objections to the quantum meruit/unjust enrichment claim, which were sustained. The suit will appear on the trial list on June 28, 1991, and the parties are currently completing discovery. The ash-hauling involved in the case is that of the M/V "Khian Sea". The City filed a motion for summary judgment which was denied without prejudice to the City's right to renew the motion at trial.

In April 1991, the City was named as a defendant in an action filed by The Reading Company (the "Reading") in the United States District Court for the Eastern District of Pennsylvania (*The Reading Company v. City of Philadelphia, et al.*, C.A. No. 91-2377). Also named as defendants were SEPTA, Conrail, and the Counties of Bucks, Chester, Delaware and Montgomery. In its suit, Reading, pursuant to the federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and the state Hazardous Sites Cleanup Act ("HSCA"), is seeking contribution from the defendants for the \$8.6 million in costs allegedly incurred by Reading in removing hazardous materials, including PCB's and asbestos, from the Reading Terminal train shed and viaduct, the site of the proposed Pennsylvania Convention Center. The City believes that City and state funds were used by Reading in the cleanup of the site and denies that it is liable to Reading for any contribution. The City filed a motion to dismiss. The City is preparing an answer to Reading's complaint; discovery in the matter has not yet commenced.

The following Water Department matters are currently being litigated:

Rate Litigation - Consumer Education and Protective Association, *CEPA, et al. v. Marrasso, et al.* initiated an appeal as ratepayers from the Water Commissioner's 1985 rate determination (effective January 10, 1986) which among other things challenges the constitutional validity of the administrative rate determination procedures. On May 14, 1990, the Pennsylvania Commonwealth Court in 575 A.2d 160 upheld the City's rate determination procedures as constitutional. Commonwealth Court declined to decide whether the City properly transferred, pursuant to state statute and City Ordinance approximately \$5 million of excess interest earnings of the Water Fund to the General Fund. The City's Petition for Reargument on this issue was denied on June 27, 1990. Plaintiffs' Petition for Allowance of Appeal was granted on January 23, 1991 (Pennsylvania Supreme Court No. 696 E.D. Allocatur Docket 1990). Both in their Petition for Allowance of Appeal and in their Commonwealth Court brief, appellants stated that as part of the relief requested, they were not seeking a rollback of rates or refunds, and affirmed that the requested relief as to issues before the court was prospective only. Thus, even if the appellants are successful in the case before the Pennsylvania Supreme Court, there should be no retroactive City financial liability. The rate process has successfully withstood similar attacks in earlier rate cases, and the City believes it has a substantial likelihood of prevailing in this case.

On January 18, 1991, community groups filed a notice of appeal from the Water Commissioner's rate determination in the 1990 water rate case to establish new rates effective January 1, 1991 (*Action Alliance of Senior Citizens, et al. v. Plonski, et al.*, CCP January 1991 No. 3008). The parties have filed their main briefs. The rate process has successfully withstood similar attacks in earlier rate cases, and the City believes that it has a substantial likelihood of prevailing in this case.

On December 3, 1990, the Philadelphia Court of Common Pleas denied a request by a group of low-income ratepayers to enjoin the Water Commissioner from proceeding under the existing rate process to change water and sewer rates for Fiscal Year 1991 (*Public Advocate, et al. v. City of Philadelphia*, November Term, 1990, No. 1687). An appeal was filed to the Commonwealth Court on December 6, 1990. On December 12, 1990, the Common Pleas Court denied a stay or injunction pending appeal. The Commonwealth Court denied a request for a stay on January 4, 1991. On January 28, 1991, a further request for a stay was filed with the Pennsylvania Supreme Court. The Pennsylvania Supreme Court denied the request for stay on April 23, 1991.

Non-Rate Litigation - *United States of America v. City of Philadelphia*, C.A. No. 88-6791, is a civil enforcement action filed in U.S. District Court for the Eastern District of

Pennsylvania in which USEPA and PaDER seek substantial penalties for the discharge of pollutants from the City's Southwest WPCP in amounts alleged to be in excess of those allowable and for storage of sludge at the Sludge Processing and Distribution Center on allegedly unpermitted sites. On September 12, 1990, a Consent Decree completely settling this lawsuit was entered by the court (the "1990 Consent Decree"). The City is required to pay approximately \$1.6 million for past violations over the next two fiscal years, pursuant to the 1990 Consent Decree. The Consent Decree further requires the City (a) to complete specified projects and comply with mandated interim and final effluent limits, (b) to issue industrial pretreatment permits for discharges from two water treatment plants, (c) to undertake biomonitoring, and (d) to retain an independent consultant to review and revise the remedial action plan to be implemented by the City for the Southwest WPCP. In addition, the Water Department has the obligation to repair, maintain and improve the facilities at the Southwest WPCP. Failure to comply with the 1990 Consent Decree will subject the City to stipulated penalties.

United States of America v. City of Philadelphia, C.A. Nos. 78-878, 78-7312, 78-1733 and 78-1831, is a federal action in the U.S. District Court for the Eastern District of Pennsylvania concerning the City's pollution abatement program which was resolved by a consent decree which became effective on September 26, 1979 (the "1979 Consent Decree"). Under the 1979 Consent Decree, the City was required (1) to comply with interim effluent discharge standards and ultimately to satisfy the discharge standards established by PaDER and the Delaware River Basin Commission, and (2) to discontinue disposal of sludge by ocean dumping. The City has substantially complied with its obligations under the 1979 Consent Decree for the Northeast WPCP, Southwest WPCP and the land application of sludge. The Northeast WPCP, however, has had difficulty in sustaining its performance so as to satisfy applicable discharge standards which resulted in the amendment of the 1979 Consent Decree dated April 13, 1988 ("Amended Consent Decree"). As a part of the Amended Consent Decree, the City is committed to physically implement a rehabilitation plan for the primary tanks at the Northeast WPCP. The physical implementation of such rehabilitation plan has not been achieved to date because of a dispute and ensuing litigation with a contractor as described below. USEPA has agreed to wait until July 1, 1991 before deciding whether to seek contempt action and injunctive relief.

On April 19, 1991, Reiter Construction Company ("Reiter") filed an action for declaratory relief in the Philadelphia Court of Common Pleas (April Term 1991, No. 4433). This action arises out of a bid submitted by Reiter on a project mandated by the 1979 Consent Decree entered into between the City and USEPA for work at the Northeast WPCP. Reiter was the low

bidder on the project, but has asked the Court for relief from the bid due to the financial difficulties of the City. The City has filed preliminary objections to the action, and disputes Reiter's right to withdraw from the bid. On May 14, 1991 Reiter filed a motion for a temporary restraining order to stop the City from declaring Reiter in default on its bid. The Court denied the motion, but has held the matter in abeyance until July 1, 1991. USEPA has also stated that it will refrain from seeking sanctions under the Amended Consent Decree until July 1, 1991. Other than such possible sanctions, and the increased costs in connection with rebidding this project, no monetary damages are at issue in this dispute.

Contractor Curtis T. Bedwell and Sons Inc. initiated four actions in the Court of Common Pleas against the City in 1989 totaling \$7 million in contract disputes over four major construction projects at the Northeast and Southwest WPCPs (*Curtis Bedwell & Sons Inc. v. City of Philadelphia*, July Term 1988, No. 4882; July Term 1988, No. 4883; August Term 1988, No. 1012; August Term 1988, No. 1013). Bedwell alleges that the City has wrongfully withheld the contract balance and moneys for additional work performed and delay damages. Bedwell also seeks indemnification for damages resulting from suits brought against the plaintiff by its subcontractors. The City denies liability and any indemnification.

The City is the defendant in litigation instituted by certain private parties in the U.S. District Court for the Eastern District of Pennsylvania (*Concerned Citizens of Bridesburg v. City of Philadelphia*, C.A. No. 85-14) concerning odors alleged to be emitted from the Water Department's Northeast WPCP. By order dated July 25, 1986, the District Court enjoined maintenance or operation of the plant in a manner causing emission violations of Commonwealth or City air management regulations and ordered the City to proceed with "debugging" of air management control equipment incorporated into the plant. The Court subsequently held the City in contempt of the order and, on January 28, 1987, ordered that upon three or more air management code violation notices within a thirty-day period the City shall pay a \$10,000 penalty, and penalties have since been levied and paid. The January 28, 1987 order also directed the City to contract for an independent study of the plant and odor problem, which study was made by Malcolm Pirnie. After receiving Phase II of Malcolm Pirnie's study, the City agreed to remediate four major odor sources, and is in the process of developing a work plan.

Claims of City responsibility in connection with alleged pollution violations at the GEMS Landfill, located in Gloucester Township, New Jersey, arise primarily out of the action of a subcontractor. The City's subcontractor placed on the site as a closure material residue from dismantled City Water

Department "Imhoff" tanks, a substance approved for such use by the New Jersey Department of Environmental Protection (*New Jersey Department of Environmental Protection v. Gloucester Environmental Management Services, Inc., and City of Philadelphia, et al.*, C.A. No. 84-0152). The City strenuously denies that the material in question is a hazardous substance and denies any responsibility for necessary site cleanup or site-related injury to private parties. The City is an additional insured under policies of insurance obtained by the City's contractor providing coverage of approximately \$11 million; and applicable in the City's opinion to the claims now made. The contractor is also contractually obligated to indemnify the City for any loss suffered as a consequence of such claims and, in connection with award of the subject contract, filed a performance bond in the amount of \$28.9 million payable to the City. Claims relating to the City's use of the site for trash and incinerator residue disposal for three months during 1980 have also been raised. In February 1989, without admitting any liability, the City entered into a settlement agreement for its share of "Phase I" site cleanup that committed the City to pay \$1.5 million. One million dollars of the settlement amount was paid by the City's primary insurance carrier. The additional \$500,000 was paid by the City. The City has filed suit against its excess insurance carrier demanding a declaration of coverage for all phases of the cleanup and immediate payment of \$500,000 plus punitive damages (*Philadelphia v. Fireman's Fund Insurance Company, D.N.J.*, C.A. No. 80-1547), and on May 10, 1989 filed a confession of judgment action on the performance bond executed by the excess insurance carrier. "Phase II" of the site cleanup is expected to cost an estimated \$25 million and the portion of the City's exposure is undetermined. In August 1990, the New Jersey Department of Environmental Protection named 180 more defendants who may share in the costs of Phase II and may also have liability for Phase I. The City is also one of a number of named defendants in at least fourteen private actions for damages in the New Jersey Superior Court including two class actions by residents living near the GEMS landfill, all of which are stayed by court order.

Fourteen homeowners have brought lawsuits against the City for property damages allegedly caused either by the Water Department's failure to repair timely a leak in the water conveyance system which occurred immediately before the strike by municipal employees in July, 1986 or by the Water Department's alleged encapsulation of an underground stream. These complaints were filed in the Court of Common Pleas and the matters are in discovery. The City believes that the aggregate value of the liability component of these claims is subject to the limitation imposed by the Political Subdivision Tort Claims Act discussed in this Appendix E.

Various other claims, in addition to the lawsuits described above have been asserted against the Water Department and in some cases lawsuits have been instituted. Many of these claims are reduced to judgment or otherwise settled in a manner requiring payment by the Water Department. As of June 19, 1991, the estimate of the aggregate loss for Fiscal Year 1991 which has resulted from these claims and lawsuits, and which will be paid out by June 30, 1991 is approximately \$4.3 million. The Water Department's proposed budget for Fiscal Year 1992 contains a reserve for Water Department claims in the amount of \$5 million. Actual claims paid out for such claims averaged \$3.1 million in the past five fiscal years.

The City and School District receive significant assistance from numerous federal, state and local government agencies in the form of grants and federal revenues sharing entitlements. The disbursement of funds received under these programs generally requires compliance with terms and conditions specified in the grant agreements and is subject to audit. Any disallowed claims resulting from such audits and relating to the City should become a liability of the General Fund or other applicable funds. In the opinion of City officials the only significant contingent liabilities related to matters of compliance are the unresolved and questioned costs in the City's Single Audit of Federal Financial Assistance for the Fiscal Year ended June 30, 1990, which amounted to \$78.9 million for all open program years. Of this amount, \$35.6 million represents unresolved costs due to the inability to obtain reports from subrecipients. Officials of the City's Office of the Director of Finance report that the audit reports representing \$27.2 million have been received and unresolved costs have been reduced to \$8.4 million as of May 1, 1991. Included in the \$78.9 million is approximately \$15.6 million disbursed for emergency repairs to privately owned apartments rented to the poor, for which the U.S. Department of Housing and Urban Development has demanded repayment.

APPENDIX F
Text of Proposed Opinion
of Bond Counsel

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_____, 1991

City of Philadelphia
1420 Municipal Services Building
Philadelphia, Pennsylvania 19102

Re: \$75,220,000 City of Philadelphia,
Pennsylvania, Gas Works Revenue Bonds,
Thirteenth Series

We have served as Bond Counsel in connection with the authorization, issuance and sale of City of Philadelphia, Pennsylvania, Gas Works Revenue Bonds, Thirteenth Series (the "Thirteenth Series Bonds"), under and pursuant to authority contained in The First Class City Revenue Bond Act of the General Assembly of the Commonwealth of Pennsylvania, Act No. 234, approved October 18, 1972, P.L. 955, as amended (the "Act"), the City of Philadelphia General Gas Works Revenue Bond Ordinance of 1975, approved May 30, 1975 - Bill No. 1871, as amended (the "General Ordinance"), and the Thirteenth Supplemental Gas Works Revenue Bond Ordinance, approved June 6, 1991 - Bill No. 1440 (the "Thirteenth Supplemental Ordinance"). The Thirteenth Series Bonds have been issued for the purpose of (i) funding a portion of the capital improvement program of the Philadelphia Gas Works ("PGW"); (ii) making a deposit to the sinking fund reserve created under the General Ordinance; and (iii) paying the costs of issuance of the Thirteenth Series Bonds.

As of April 30, 1991, \$606,807,000 aggregate principal amount of Gas Works Revenue Bonds were outstanding under the General Ordinance and appropriate supplemental ordinances. The Thirteenth Series Bonds are equally and ratably secured with all such prior bonds and will be equally and ratably secured with all bonds issued in the future under the General Ordinance (all such prior bonds, the Thirteenth Series Bonds and all bonds to be issued under the General Ordinance in the future, collectively, the "Bonds").

The City of Philadelphia (the "City") has made a pledge of, and granted a security interest in, all Project Revenues (as defined in the General Ordinance) and all accounts, contract rights and general intangibles representing Project Revenues to secure the payment of the Bonds. Prior to default, the General Ordinance establishes the following priorities in application of the Project Revenues: (1) Net Operating Expenses, as defined therein; (2) required payments into the sinking fund to pay principal of and interest on the Bonds and to accumulate, or to restore any deficiency in, the sinking fund reserve in respect thereof; (3) payment of general obligation bonds which have been adjudged to be self-liquidating on the basis of expected revenues from PGW; (4)

payment of interest and sinking fund charges of other general obligation debt incurred for PGW; and (5) payment of City Charges, as defined therein. Under certain circumstances, the remaining balance may be applied to other proper purposes of the City. In the Thirteenth Supplemental Ordinance, the City has covenanted that, as long as any of the Bonds issued pursuant thereto remain outstanding, all Project Revenues shall be deposited in, held in and disbursed from one or more unsegregated accounts of PGW which shall be separate from and not commingled with moneys or accounts of the City not held exclusively for PGW purposes.

As Bond Counsel for the City, we have examined (a) such constitutional provisions, statutes and regulations as we deemed necessary, including the Act, the General Ordinance and the Thirteenth Supplemental Ordinance, (b) the proceedings authorizing the issuance and sale of the Thirteenth Series Bonds, and (c) such certificates, opinions, receipts and other documents as we have deemed necessary, including, without limitation a certification of officials of the City having responsibility for issuing the Thirteenth Series Bonds, given pursuant to the Internal Revenue Code of 1986, as amended (the "Code"). We have also examined a fully executed and authenticated Thirteenth Series Bond. We assume all other Thirteenth Series Bonds are in such form and are similarly executed and authenticated.

In rendering the opinion set forth below, we have relied upon the genuineness, accuracy and completeness of all documents, records, certifications and other instruments we have examined, including, without limitation, the authenticity of all signatures appearing thereon.

Except with respect to Paragraph 4 below, our opinion is given only with respect to the laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof.

On the basis of the foregoing, we are of the opinion that:

1. The City has the power to perform its obligations under the General Ordinance, the Thirteenth Supplemental Ordinance and the Thirteenth Series Bonds and is authorized to issue the Thirteenth Series Bonds.

2. The terms of the Thirteenth Series Bonds comply with the requirements of the Act, the General Ordinance and the Thirteenth Supplemental Ordinance, and the purposes for which the Thirteenth Series Bonds have been issued are lawful purposes under the Act and the General Ordinance.

3. The Thirteenth Series Bonds constitute valid, legal and binding obligations of the City, enforceable in accordance with their terms (subject to any applicable bankruptcy, insolvency, moratorium or other similar laws or legal or equitable principles affecting the enforcement of creditors' rights generally).

4. Under existing statutes, regulations, rulings and court decisions, interest on the Thirteenth Series Bonds, including original issue discount accruing on the Thirteenth Series Bonds maturing on June 15, 2021, is not includable in gross income of the holders thereof for federal income tax purposes and is not a specific preference item for purposes of computing the alternative minimum tax imposed on individuals and corporations. However, interest on the Thirteenth Series Bonds paid or accrued during any period any Thirteenth Series Bond is held by a corporation may be subject to alternative minimum tax and the environmental tax imposed under the Code due to the adjustment for adjusted current earnings provided for in the Code. In addition, interest on the Thirteenth Series Bonds received or accrued in any taxable year by certain foreign corporations may be included in computing the "dividend equivalent amount" of such corporations subject to the branch profits tax imposed on such corporations under Section 884 of the Code. Further, interest on the Thirteenth Series Bonds may be subject to federal income taxation under Section 1375 of the Code for S Corporations which have subchapter C earnings and profits at the close of the taxable year if greater than 25% of the gross receipts of such S corporations is passive investment income.

Attention is invited to the fact that ownership of the Thirteenth Series Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, property and casualty insurance companies, individual recipients of Social Security or Railroad Retirement benefits, and taxpayers (including banks, thrift institutions and other financial institutions subject to Section 265 of the Code) who may be deemed to have incurred or continued indebtedness to purchase or carry the Thirteenth Series Bonds. We express no opinion as to any of such collateral consequences.

5. Under the laws of the Commonwealth of Pennsylvania, as presently enacted and construed, interest on the Thirteenth Series Bonds and any gain from the sale thereof are exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax and the Thirteenth Series Bonds are exempt from personal property taxes in Pennsylvania.

In providing this opinion, we advise you as follows:

(a) It may be determined in the future that interest on the Thirteenth Series Bonds, retroactive to the date of issuance thereof or prospectively, will not be excluded from gross income of the owners of the Thirteenth Series Bonds for federal income tax purposes if certain requirements of the Code are not met subsequent to the issuance of the Thirteenth Series Bonds. We have assumed continuing compliance by the City with the covenants of the City that are intended to comply with the provisions of the Code relating to actions to be taken by the City in respect of the Thirteenth Series Bonds after the issuance thereof to the extent necessary to effect or maintain the federal tax-exempt status of the interest on the Thirteenth Series Bonds. These covenants

relate to, inter alia, the use and investment of proceeds of the Thirteenth Series Bonds.

(b) The Thirteenth Series Bonds constitute limited obligations of the City and are payable solely from the Project Revenues, as defined in the General Ordinance, and amounts in the sinking fund, including the sinking fund reserve created under the Act and the General Ordinance. The Thirteenth Series Bonds do not pledge the credit or taxing power of the City or create any debt or charge against property of the City other than the Project Revenues and amounts in such sinking fund, including the sinking fund reserve.

(c) We do not express any opinion as to the accuracy or completeness of the preliminary or final Official Statement of the City relating to the Thirteenth Series Bonds, including the appendices thereto.

Very truly yours,

ASTOR, WEISS & NEWMAN