# PHILADELPHIA GAS WORKS COST/BENEFIT ANALYSIS





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# I ENGAGEMENT OVERVIEW AND APPROACH

In September 2012, the City of Philadelphia (the "City") and the City-owned Philadelphia Gas Works ("PGW") retained Lazard and M.R. Beal & Company ("M.R. Beal") as its independent Financial Advisors in connection with its ongoing effort to determine whether the City should sell PGW to a private entity ("Privatized PGW"). As part of this engagement, Lazard was asked to provide an independent analysis of the financial costs and benefits of proceeding with a sale ("Cost/Benefit Analysis"), including a financial analysis of the potential impact of a sale on the amount of various future annual taxes that would be collected/received by the City from a private entity relative to the \$18 million annual franchise fee ("Franchise Fee") that the City currently receives from PGW. Lazard's other responsibilities included assisting the City in selecting a transaction agent/broker ("Broker") to manage the sale process, and ongoing responsibilities include independently evaluating the Broker's approach and various recommendations and assisting the City in its analysis of whether to move forward with a proposed transaction. Lazard has also been retained to assist the City, PGW and Broker in the proposed sale process negotiations.

#### A. BACKGROUND

Prior to Lazard's current engagement, in July 2010 the City retained Lazard as its Strategic Alternatives Advisor to conduct a strategic assessment ("Strategic Assessment") of the feasibility and consequences of transferring the ownership and/or operation of PGW to a private entity. After a period of analysis and review, in February 2012 Lazard submitted its Strategic Assessment to the City in respect of PGW, in which Lazard indicated its belief that the City could likely obtain a sale price in excess of PGW's liabilities and recommended that the City pursue a process to transfer ownership and operation of PGW to a private entity via a strategic sale. The Strategic Assessment included an independent valuation analysis of PGW, an analysis of the City's PGW-related liabilities ("PGW-related Liabilities"), consideration of the benefits and disadvantages of a privatization and a "Market Sounding" process to evaluate potential buyer interest.

#### B. COST/BENEFIT ANALYSIS APPROACH

Lazard's Cost/Benefit Analysis contained herein consisted of the following tasks:

- **PGW Valuation**: Lazard updated its valuation analysis based on the August 2013 PGW operating forecast provided by PGW management and to reflect current market conditions, including interest rates, recent precedent M&A sale transactions and observed valuation metrics of publicly-traded comparable companies
- **PGW-related Liabilities**: In connection with the Cost/Benefit Analysis, the City and PGW provided updated estimates of the various PGW-related Liabilities which it would need to discharge upon the sale or privatization of the Company (to the extent such liabilities were not to be assumed by the buyer in the privatization transaction). Lazard's analysis of the



PGW-related Liabilities was updated based on the June 2013 estimates of unfunded pension and other post-employment benefit ("OPEB") liabilities provided by the City and PGW. M.R. Beal conducted an updated debt defeasance cost analysis based on current market pricing and the projected August 2014 outstanding balance information. Swap termination estimates based on City monthly swap reports as of July 31, 2013

- Tax Analysis: Lazard estimated the present value of certain tax revenues the City and the School District of Philadelphia ("School District") would expect to receive from a Privatized PGW, based on assumptions and estimates provided by the City and PGW, including the Business Income and Receipts Tax ("BIRT")(a), the Use and Occupancy Tax ("UOT") and applicable real estate taxes (including Public Utility Realty Tax Act ("PURTA"))
- **Franchise Fee Analysis:** The City currently receives, and is projected to continue to receive, a Franchise Fee of \$18 million per year. Lazard estimated the present value to the City of the projected Franchise Fee using the dividend discount model, an analysis that treats the Franchise Fee as a perpetual dividend to the City for valuation purposes
- **Qualitative Analysis:** To supplement the quantitative costs and benefits related to a potential sale of PGW, Lazard provided a qualitative assessment of the benefits and considerations of privatization to the City

#### C. VALUATION APPROACH

Lazard performed a valuation analysis of PGW based on financial projections provided August 2013 by PGW management. The analysis included the application of certain private entity characteristics (e.g., an assumed private entity capital structure, various income and other taxes, etc.), and assumed the ability for the City to prepay PGW's unfunded pension liabilities out of the proceeds of a sale, with the new owner being able to continue to collect the related expense in rates. The resulting hypothetical entity used for this analysis is referred to herein as "Privatized PGW." The valuation results presented herein are shown on an "enterprise value" basis, reflecting the implied value of the Privatized PGW's business on a debt-free basis, as of August 31, 2014. Lazard was asked to conduct its analysis assuming the following financial, social, and public policy criteria ("City's Public Policy Criteria"):

- Maintain the senior citizen discount program in its current form and all Pennsylvania Public Utility Commission ("PA PUC") mandated discount programs
- Implement a base rate freeze for a mutually agreed-upon period of time, but at a minimum through December 2017
- Honor the collective bargaining agreement in place at the time of sale closing
- Maintain PGW headquarters in Philadelphia and a specified minimum number of employees in Philadelphia for at least 3 years



Satisfy liabilities for PGW-related pensions and for other post-employment benefits (management and funding), as applicable, including maintaining dedicated trust funds for any PA PUC-granted rate recovery of employee benefits<sup>(a)</sup>

Various assumptions regarding synergy levels and the treatment of OPEB funding resulted in the creation of the following scenarios (all cases assume no base rate increase through the 5-year forecast period and inflationary base rate increases thereafter):

- No Synergies Case<sup>(b)</sup>: The estimated enterprise value of Privatized PGW assuming the August 2013 PGW management forecast with no acquiror-generated synergies (included as a benchmark for illustrative purposes). Valuation also assumes that Privatized PGW will continue to collect in rates the amount embedded for PGW's unfunded pension liabilities (which liabilities will be paid out of sale proceeds by the City at closing)
- Moderate Synergies Case<sup>(b)(c)</sup>: The estimated enterprise value of Privatized PGW assuming a potential acquiror achieves modest operating synergies (50% of those announced on average in past utility transactions)<sup>(d)</sup> as well as assuming the same treatment of unfunded pension liabilities as assumed in the No Synergies Case. Synergy assumptions were applied only to certain non-fuel O&M expense line items identified by PGW management
- Industry Benchmark Synergies Case<sup>(b)(c)</sup>: The estimated enterprise value of Privatized PGW assuming a potential acquiror achieves industry benchmark operating synergies (100% of those announced on average in past utility transactions)<sup>(d)</sup> as well as assuming the same treatment of any unfunded pension liabilities as assumed in the No Synergies Case. Synergy assumptions were applied only to certain non-fuel O&M expense line items identified by PGW management
- Prepaid OPEB Case<sup>(b)</sup>: The estimated enterprise value of Privatized PGW assuming the Industry Benchmark Synergies Case (i.e., using such Case's assumptions regarding synergies and treatment of unfunded pension liabilities) as well as assuming that the acquiror would prepay any unfunded OPEB liabilities and that the Privatized PGW would subsequently continue to recover these prepaid expenses in rates, as PGW currently does. The higher valuation resulting in the Prepaid OPEB Case assumes the buyer pays the City up front (as part of the purchase price) the unfunded OPEB liability, that this future liability is assumed/retained and subsequently discharged by the City and that the buyer is able to retain in rates the amounts currently authorized for unfunded OPEB expense recovery

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Source: PGW projections and City of Philadelphia estimates.

<sup>(</sup>a) The pension fund is assumed to be fully funded and closed upon a sale/transfer of PGW in all Cases.

<sup>(</sup>b) All Cases assume that the PA PUC would continue to grant the Privatized PGW the ability to recover in rates, over time, amounts representing ongoing recovery of unfunded pension (all Cases) and unfunded OPEB (Prepaid OPEB Case) liabilities, which recoveries are required to support the related component of value paid by the buyer for PGW at closing. The Privatized PGW in this Case would no longer incur the forecasted (cash) expenses related to these liabilities.

<sup>(</sup>c) Note that the synergies in the Moderate and Industry Benchmark Synergies Cases would be expected to eliminate the need for the \$50 million base rate increase in fiscal year 2018 as contemplated by PGW management.

<sup>(</sup>d) U.S. Electric & Gas Utility transactions (where expected synergy levels have been publicly disclosed). In the No Synergies and Moderate Synergies Cases, no synergies for bad debt expense are assumed to be recognized. In the Industry Benchmark Synergies and Prepaid OPEB Cases, 50% of the synergies for bad debt expense announced on average in past utility transactions are assumed to be recognized.



#### II COST/BENEFIT ANALYSIS SUMMARY

Based on the quantitative and qualitative analysis contained herein, Lazard believes that the benefits to the City of privatizing PGW are likely to exceed the associated costs.

# A. SUMMARY QUANTITATIVE ASSESSMENT

The table below summarizes the estimated quantitative financial benefits and costs to the City of a PGW privatization based on the analysis and assumptions set forth herein. On a present value basis, the estimated net (costs)/benefits to the City range from approximately \$278 million to \$765 million. The range is derived by comparing the estimated gross value/proceeds achieved from the sale of PGW plus expected future tax receipts less the estimated costs to discharge the City's PGW-related Liabilities and foregone future PGW Franchise Fees.

# QUANTITATIVE COST/BENEFIT ANALYSIS SUMMARY (PRESENT VALUE)

(\$ in millions)

ESTIMATED BENEF	FITS	ESTIMATED COSTS				
	PRESENT		PRESENT			
DESCRIPTION VALUE		DESCRIPTION	VALUE			
Gross Proceeds from Sale of PGW(a)	\$1,450 - \$1,900	Debt Defeasance and Termination Payments(b)	(\$880)			
		Unfunded Pension Liabilities and Other(c)	(\$128)			
		Estimated Transaction Fees(d)	(\$20)			

(\$20)**Expected Discharge of Liabilities** (\$1,028)

Projected Net Sale Proceeds: \$422 million – \$872 million								
Business Income and Receipts Tax <sup>(e)</sup>								
Real Estate Tax \$10 – \$1								
Expected Future Tax Receipts(f)	\$11 – \$17	Unrealized PGW Franchise Fees(g)	(\$124) - (\$155)					
Total Projected Benefits	\$1,461 – \$1,917	Total Projected Costs	(\$1,152) - (\$1,183)					

Projected Net Quantitative Benefits to City General Fund (Present Value): \$278 million - \$765 million

A portion of the upfront proceeds to the City would be set aside to reserve against related contingent liabilities that may arise in the future (e.g., potential future unfunded pension/OPEB liabilities, environmental liabilities, etc.)

Aon Hewitt, Brown & Brown, M.R. Beal analysis, PGW projections and City of Philadelphia estimates. Source.

Estimated range based on the low end of Moderate Synergies Case and high end of Industry Benchmark Synergies Case. (a) (b)

- Debt defeasance costs and termination payments shown net of a reduction/offset as a result of existing PGW total cash and cash equivalents of \$198 million, consisting of \$91 million of cash, \$106 million in a sinking fund and \$1 million in a Capital Improvement Fund (estimated as of August 31, 2014). Actual debt defeasance costs would likely be lower than those costs reflected herein (assuming no change in interest rates) due to the potential to purchase open market securities and the likely ability to tender for certain bonds for defeasance purposes.
- (c) No additional quantitative impact from certain other potential liabilities (e.g., environmental) reflected as it is expected that most or all of such liabilities will be assumed by the buyer as part of the sale process pursuant to the final terms of the Purchase and Sale Agreement.

Estimated transaction fees include those for Broker, legal and financial, among others. (d)

- BIRT, per City legal analysis as communicated to Lazard, applies only to gross receipts and net income that are not regulated by tariff of the PA PUC or the Interstate Commerce Commission. The only substantial current line of PGW business that is not part of its tariff, and thus to which the BIRT would apply were PGW a private company, is PGW's Parts and Labor. A Privatized PGW might structure itself differently to remove certain charges from tariff regulation. For purposes of this analysis, however, Lazard has estimated BIRT receipts based only on the Parts and Labor Plan. Lazard applied a net income margin of 6% for the Parts and Labor Plan based on the 5% - 7% estimate provided by PGW's management.
- (f) Represents the projected present value of tax revenues to the City, based on City tax estimates. Proceeds from the Real Estate Tax are split between the City (approximately 45%) and the School District (approximately 55%).
- A \$1.0 million change in PGW's annual Franchise Fee corresponds with a change in present value of approximately \$6.9 \$8.6 million.



Note that the analysis is a preliminary examination of the costs and benefits, and does not evaluate the potential specific transaction terms that may be negotiated by the City or a potential buyer. Additionally, this analysis does not quantify any social/economic benefits potentially resulting from the City's use/reinvestment of PGW sale proceeds (so-called "multiplier effect"), nor does this analysis include the estimated present value benefits related to Use & Occupancy Tax and real estate (including PURTA) tax revenues that would accrue to the School District.

# B. SUMMARY QUALITATIVE ASSESSMENT

The columns below summarize the identified qualitative benefits to the City of a potential PGW privatization—taken together with the estimated quantitative benefits summarized above, the analysis indicates that the benefits to the City of privatizing PGW are likely to exceed the associated costs/considerations. Importantly, Privatized PGW would continue to be regulated by the PA PUC and social programs would be maintained, as described in the City's Public Policy Criteria.

# SUMMARY QUALITATIVE ASSESSMENT

#### PRIVATIZATION BENEFITS

- Transfer of ongoing PGW/financial and operating risks from City taxpayers to private shareholders
- Rate benefits for PGW customers related to the lower probability of a rate increase due to synergies
- Additional potential long-term rate benefits for PGW customers related to Privatized PGW's ability to operate more efficiently and/or pursue new business opportunities
- Fully-funded PGW pension and potential for fully-funded PGW OPEBs
- Potential availability of funds for retirement of long-term City obligations and to offset any loss related to the Franchise Fee
- Benefits related to reallocating City personnel and resources away from PGW administration and toward other City operating priorities
- Potential additional community programs and charitable giving by a Privatized PGW, consistent with the policies and commitments typical of other investor-owned utilities
- Stronger Privatized PGW balance sheet and enhanced ability to invest in additional infrastructure, pipeline replacement/safety programs, etc.

# PRIVATIZATION COSTS/CONSIDERATIONS

- City opportunity cost and execution risks related to pursuit of a privatization of PGW
- Loss of direct City control of future PGW
- Potential for future payment/contribution by the City in respect of certain other liabilities (e.g., potential future unfunded pension/OPEB liabilities, environmental liabilities, etc.) in the event that the City is unable to fully transfer responsibility for such liabilities to the buyer as part of the sale process



# III COST/BENEFIT ANALYSIS DETAILS

### A. PGW VALUATION ANALYSIS

Lazard's PGW valuation analysis was performed using each of the following cases: (a) the No Synergies Case; (b) the Moderate Synergies Case; (c) the Industry Benchmark Synergies Case; and (d) the Prepaid OPEB Case, as previously defined. Using a number of traditional valuation methodologies, Lazard derived an estimated valuation range for each of the above cases.

# Valuation Methodologies

Lazard's valuation analysis employed the following four valuation methodologies ("Valuation Methodologies"):

- Discounted Cash Flow ("DCF"): A "forward-looking" approach that estimates the value of an asset or business based on the present value of expected future unlevered after-tax cash flows to be generated by that business. This method employs a discount rate (weighted average cost of capital, "WACC") range to estimate present values of interim cash flows as well as the present value of an assumed "terminal value," calculated at the end of the 10-year financial projection period
- Dividend Discount Model ("DDM"): A "forward-looking" approach that estimates the equity value of an asset or business based on the present value of expected future dividends to be generated and paid by that business. Enterprise value is then derived by adding the assumed level of debt at the time of the transaction to the calculated equity value
- Comparable Company Multiples: Estimates the public market enterprise and equity values of a company by applying financial trading metrics of other publicly-traded companies with relatively similar businesses and financial characteristics to the equivalent metrics of such company
- Precedent Transaction Multiples: Estimates the private market enterprise and equity values of a company by examining publicly-disclosed information for M&A transactions of comparable companies or assets, analyzing the purchase price as a multiple of certain appropriate metrics, and applying the resulting multiples to the equivalent metrics of such company

# **Sensitivity Analysis**

Each valuation methodology was performed using a range of key inputs and assumptions. For the DCF and DDM methodologies, sensitivities were applied to the discount rates (WACC and cost of equity, respectively) and the capital structure (debt-to-equity ratio). Operational forecasts were also sensitized in areas such as the potential for a future base rate increase and the level of synergies/efficiencies a potential buyer might achieve. For the Comparable Company and Precedent

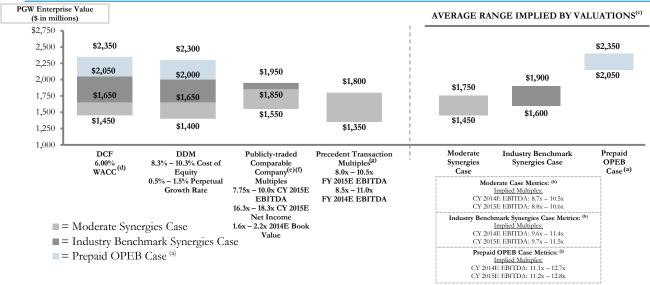


Transaction multiples, ranges of publicly-available Enterprise Value/EBITDA, Equity Value/Net Income and Equity Value/Book Value ratios were utilized.

# Privatized PGW Valuation Update Summary

Lazard valued PGW under four different cases (No Synergies Case, Moderate Synergies Case, Industry Benchmark Synergies Case and Prepaid OPEB Case) using various Valuation Methodologies, including discounted cash flow, dividend discount, comparable publicly-traded companies and precedent transactions analyses. The range implied by an average of the various Valuation Methodologies was \$1.45 – \$1.75 billion, \$1.60 – \$1.90 billion and \$2.05 – \$2.35 billion for the Moderate Synergies Case, Industry Benchmark Synergies Case and Prepaid OPEB Case<sup>(a)</sup>, respectively. Note that Lazard's valuation analysis excludes PGW management's forecasted \$50 million base rate increase in FY 2018. The results of these analyses are illustrated below:

#### **VALUATION SUMMARY**(b)



Source: PGW projections.

- (a) The higher valuation resulting in the Prepaid OPEB Case of approximately \$450 million assumes the buyer pays the City up front (as part of the purchase price) the unfunded OPEB liability, that this future liability is assumed/retained, and subsequently discharged, by the City, and that the buyer is able to retain in rates the amounts currently authorized for unfunded OPEB expense recovery.
- (b) Estimated valuations as of August 31, 2014. No Synergies Case not shown. The Moderate Synergies and Industry Benchmark Synergies Cases are used in the DCF and DDM valuations, while the No Synergies Case is used in the Publicly-traded Comparable Company and Precedent Transaction analyses (includes unfunded pension expense offsets of \$16 million annually, adjustments to the recognition of Distribution System Improvement Charge ("DSIC") related revenue which combine to increase base FY 2015 EBITDA by approximately (\$1) million per year). The Comparable Company analysis applies a 15% 25% "control premium" (the amount a buyer is typically willing to pay over the current market price to exert control over a company), while the Precedent Transaction multiples are assumed to account for the impact of transaction benefits when applied to the No Synergies metrics. Analysis does not take into account valuation impacts of federal or other government-mandated expenditures that could arise in the area of system integrity that requires related rate relief. The No Synergies Case valuation is provided in the Appendix.
- (c) The Case reference ranges are derived from a rounded average of the four Valuation Methodologies for the Moderate and Industry Benchmark Synergies Cases, and a rounded average of the DCF and DDM methodologies in the Prepaid OPEB Case.
- (d) DCF range derived from various exit/terminal value assumptions/ranges.
- (e) Reference range includes a 15.0% control premium to the implied equity value (enterprise value less net debt) for the Moderate Synergies Case and a 25.0% control premium to the implied equity value for the Industry Benchmark Synergies Case.
- (f) Based on Calendar Year ("CY") 2015E (No Synergies Case) EBITDA of \$165 million, CY 2015E net income of \$63 million, 2014E book value of \$543 million and 2014E net debt of \$518 million.
- (g) Based on FY 2014E (No Synergies Case) EBITDA of \$167 million and FY 2015E EBITDA of \$166 million.
- (h) Based on CY 2014E and CY 2015E (No Synergies Case) EBITDA of \$166 million and \$165 million, respectively.
- (i) Based on CY 2014E and CY 2015E EBITDA of \$185 million and \$183 million, respectively, which represent the No Synergies Case EBITDA plus an OPEB expense offset of \$18.5 million.



# B. UPDATED PGW-RELATED LIABILITIES

# **Estimated Debt Defeasance and Termination Costs**

M.R. Beal analyzed the defeasance costs associated with PGW's revenue bonds as well as the termination costs for PGW's swap arrangements. M.R. Beal estimates that as of August 31, 2014 the estimated cost of defeasance of PGW's revenue bonds, including various termination fees from the Company's swaps, is \$1.1 billion.

# Cash and Cash Equivalents

As of August 31, 2014, PGW management projects that PGW will have cash and cash equivalents on hand of \$198 million, consisting of \$91 million of cash, \$106 million predominantly invested in short-term, low-risk investments in a sinking fund (including forward rate agreement) and \$1 million in a Capital Improvement Fund.

# **Estimated Unfunded Pension Liability**

Based on the Philadelphia Gas Works Pension Plan Actuarial Valuation analysis, completed June 2013 by Aon Hewitt, PGW's estimated unfunded pension liability in a sale situation is approximately \$128 million. This estimate assumes a 7.95% earnings rate (consistent with the actuarial assumptions for the City's other pension funds) and other actuarial assumptions relating to mortality rates, turnover, disability, salary increases and retirement age. The valuation is based on the projected fund assets as of September 2013 and the projected present value of liabilities as of December 2014.

# Estimated Unfunded OPEB Liability(a)

Based on the Philadelphia Gas Works Health and Life Insurance Plan for Retired Employees analysis, completed June 2013 by Brown & Brown Consulting, PGW's estimated unfunded OPEB liability in a sale situation is approximately \$325 – \$414 million, an amount which varies depending on actuarial assumptions related to retirement eligibility. The estimate assumes a 7.95% discount rate, and the actuarial valuation of these liabilities uses the methods and procedures prescribed under GASB 45 Statement for Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions.

#### C. FUTURE TAX RECEIPTS

Lazard estimated the present value of PGW's projected tax payments to the City using financial projections provided by PGW management, the City's estimates of assessed PGW-owned property values and publicly-available tax rates in Philadelphia.

Source:



The following Privatized PGW taxes and rates are projected to be received by the City and School District:

TAX ANALYSIS ASSUMPTIONS					
TAX	2014 RATE				
BIRT—Gross Receipts(a)	1.415 mills on gross receipts of unregulated, non-tariff businesses such as PGW's Parts and Labor				
BIRT—Net Income <sup>(a)</sup>	6.43% on net income of unregulated, non-tariff businesses such as PGW's Parts and Labor Plan				
Real Estate Tax(b)(c)	1.34% of assessed PGW-owned property				
UOT <sup>(d)</sup>	1.13% of assessed PGW-owned property				

The Business Income and Receipts Tax on gross receipts, the Real Estate Tax and the Use & Occupancy Tax are each senior claims on a company's cash flows. These tax revenues to the City would exhibit relatively low volatility since they are assessed on gross (regulated) revenues and appraised real estate values. Given the risk profile and senior nature of these claims, Lazard discounted these projected tax payments to the City at the projected after-tax cost of debt of Privatized PGW (2.75%).

The tax revenues to the City from the Business Income and Receipts Tax on net income would exhibit a risk profile comparable to Privatized PGW's projected dividends (i.e., subordinated to other PGW financial obligations). As such, Lazard discounted these projected tax payments at Privatized PGW's projected cost of equity (9.25%).

Based on this analysis, Lazard estimates a present value range of a Privatized PGW's projected tax payments to the City, in all cases, of \$11 – \$17 million. For further analysis, see Appendix D.

#### D.PGW FRANCHISE FEE

#### Franchise Fee Overview

The Franchise Fee originated in 1972 when control of PGW was transferred to the Philadelphia Facilities Management Corporation ("PFMC") from the United Gas Improvement Company, which had previously been contracted by the City to manage PGW from 1897 – 1972. Originally

Source: PGW projections and City of Philadelphia estimates.

(c) Proceeds from the Real Estate Tax are split between the City (approximately 45%) and the School District (approximately 55%).

<sup>(</sup>a) BIRT is assessed on both gross receipts and net income. The net income rate shown is for 2014 and is set to decline to 6.0% by 2023. The only substantial current line of PGW business to which the BIRT is likely to apply under a Privatized PGW is the Parts and Labor Plan. Based on estimates of PGW's management, Lazard applied a net income margin of 6% for this business.

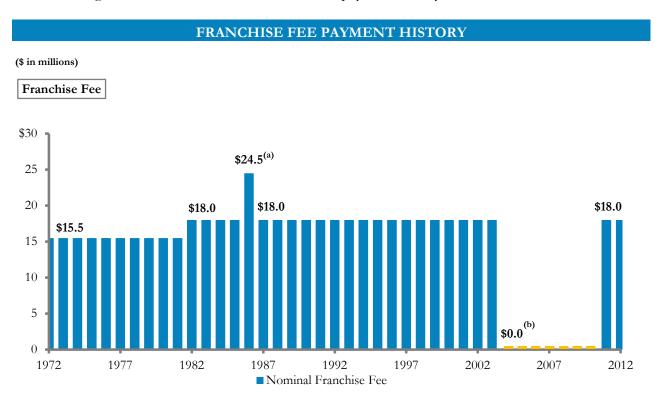
<sup>(</sup>b) Lazard calculated PGW's real estate tax using estimates provided by the City. The City assumes a PGW-owned real estate portfolio of \$39 million, a tax rate of 1.34% and an occupancy rate of 100%.

d) All proceeds from the UOT go directly to the School District. The City assumes a PGW-owned real estate portfolio of \$39 million, a tax rate of 1.13% and an occupancy rate of 100%.



established at \$15.5 million, the Franchise Fee was designed to transfer PGW profits to the City as a perpetual source of revenue. In 1980, the PFMC increased the Franchise Fee to \$18 million.

The following table illustrates PGW's Franchise Fee payment history:



# Franchise Fee NPV—Dividend Discount Analysis

The Franchise Fee is effectively subordinated to PGW operating expenses, capital expenditures and debt service. In addition, as evidenced by the City's decision to effectively suspend the Franchise Fee over the 2004 – 2010 period, by "granting back" to PGW its \$18 million annual dividend payment, the Franchise Fee, while mandatory under the City's Management Agreement with the PFMC, is susceptible to PGW performance and related financial market risks. As such, Lazard evaluated the Franchise Fee as a perpetual dividend to the City (i.e., a payment made after all other financial obligations are satisfied), tantamount to the return an equity investor would receive. The projected \$18 million Franchise Fee was discounted at an applicable, Capital Asset Pricing Model ("CAPM") derived equity cost of capital<sup>(c)</sup>, assuming PGW's historically observed equity-to-total capitalization, which has ranged from approximately 20.0% - 30.0% By utilizing a range of observed equity-to-

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Source: U.S. Bureau of Labor Statistics, the City of Philadelphia, FactSet and Ibbotson's.

<sup>(</sup>a) In 1986, PGW made a one-time Franchise Fee payment of \$24.5 million, at the request of Mayor Wilson Goode, to help the City balance its budget.

<sup>(</sup>b) During the 2004 – 2010 period, the City effectively suspended the Franchise Fee due to PGW's weak financial condition, by granting back to PGW its \$18 million annual dividend payment. The chart does not illustrate the 2007 – 2008 repayment of PGW's \$45 million loan from the City, originated in 2000.

 <sup>(</sup>c) Lazard used the CAPM to derive a Privatized PGW's implied cost of equity, which incorporates observed market betas of PGW's publicly-traded comparable companies, and utilizes the 10-year U.S. Treasury rate as the risk free rate and Ibbotson's 2013 market risk premium.
 (d) Data provided by PGW management. As of August 2013, PGW had an equity-to-total capitalization ratio of 25.3%.



total capitalization ratios (which, in turn, affect the discount rate range), Lazard created sensitivities regarding the estimated present value range of PGW's future projected Franchise Fees.

Based on this analysis, Lazard calculated an estimated present value range of PGW's future projected Franchise Fees of \$124 – \$155 million.

#### NET PRESENT VALUE OF FRANCHISE FEE

(\$ in millions)

Dividend Discount Analysis								
	Implied	NPV of Franchise						
Equity/Cap.	Cost of Equity	Fee in Perpetuity						
20.0%	14.5%	\$124						
22.5%	13.5%	\$133						
25.0%	12.7%	<b>\$141</b>						
27.5%	12.1%	\$149						
30.0%	11.6%	\$155						

# E. QUALITATIVE BENEFITS/CONSIDERATIONS

#### **Potential Privatization Benefits**

# Transfer of Ongoing PGW Risks

Under City ownership, the financial and operating risks of PGW are currently borne by the City and its taxpayers. For example, if performance suffers at the gas utility and the related increased costs are not permitted by the PA PUC to be recovered in rates (e.g., due to unjustified operating expenses, fraud or other wasteful spending), or a request to increase rates is otherwise politically unpalatable, the City and its taxpayers would likely be required to bear such costs. This scenario has occurred throughout PGW's history (see timeline in Appendix A) and in the recent past, as evidenced by the effectively suspended Franchise Fee from 2004 – 2010 and \$45 million emergency loan that the City provided PGW in FY2001 that was subsequently repaid in FY2008. As a municipally-owned entity, there is no party other than the City and its taxpayers available to bear such costs.

# Potential Rate Benefits for PGW Customers

A Privatized PGW could produce lower base rates for PGW customers (relative to the status quo) over the short term via a rate freeze through a mutually agreed-upon time, and potentially lower base rates over the long term if the financial benefits associated with improved efficiencies of the Privatized PGW reduce future rate pressure. For example, the Industry Benchmark Synergies Case indicates that PGW management's projected need for a \$50 million base rate increase in fiscal year 2018 would no longer be required. Improved efficiencies may come from combining existing systems, allocating capital differently, and/or scale benefits related to the purchase of fuel and other products and services, among other sources.



# New Business Opportunities

We believe that new business/revenue opportunities are also more likely to be realized for the Privatized PGW as geographic and administrative constraints are removed and new owners seek growth opportunities—while difficult to quantify, these growth opportunities could have positive economic and job creation benefits for the City. As a City-owned entity, PGW is currently barred by the Pennsylvania Constitution from investing in or guaranteeing the obligations of nongovernmental businesses and may only operate within the boundaries of the City. In addition, PGW is currently required to follow a multi-tiered budget process that is subject to various approvals by the PFMC, the Director of Finance, the Gas Commission and City Council (Gas Commission and City Council approvals involve separate public hearings). City Council must also authorize the issuance of debt securities for PGW, and both the Gas Commission and City Council must authorize contracts for longer than one year or the acquisition or conveyance of real estate at PFMC's request.

# Reduction in PGW-related Liabilities

A sale of PGW to a private entity would also transfer, eliminate and/or otherwise reduce/minimize the risks associated with various PGW-related Liabilities and other risks presently borne solely by the City. The City has indicated that all outstanding PGW debt and related swap and other contracts would be retired upon the sale of PGW. Sale proceeds would fully fund the City's PGW-related pension and transfer the responsibility for the City's PGW-related OPEB liability to the Privatized PGW (or, in the Prepaid OPEB Case, potentially fully fund the OPEB liability up front).

# Reallocation of City Resources

The City is also likely to be able to achieve certain benefits related to reallocating City personnel and resources away from PGW administration and toward other City operating priorities. The Economy League of Greater Philadelphia has calculated that more than 30 elected and appointed officials manage, in some capacity, PGW. Removing PGW's relatively complex oversight structure and related administrative and approval processes might also achieve second order benefits related to decision-making and cost improvements that may manifest itself in reduced future rate pressure. Transferring the ownership, operational control and administrative responsibility of PGW to the private sector would establish PGW as an investor-owned utility similar to most large-city utilities in the U.S.<sup>(a)</sup>.

# Potential New Community Programs

A Privatized PGW could also likely benefit the City through additional community programs and charitable giving, consistent with the policies and commitments typical of other investor-owned utilities in Pennsylvania and elsewhere.



# More Stable Capital Structure

The privatization of PGW would likely be accompanied by an equity infusion that would reduce the current leverage levels of PGW (historically 70% – 80%), providing for a more stable capital structure (e.g., 50%, consistent with other investor-owned utilities) for the Privatized PGW going forward. A more stable balance sheet should enhance Privatized PGW's ability to invest in additional infrastructure, pipeline replacement, safety programs and other initiatives.

# Potential Privatization Costs/Considerations

# City Opportunity Cost and Execution Risks

The privatization of PGW would entail certain opportunity costs (e.g., time and expenses) to the City associated with City resources throughout the sale process. Additionally, the City will assume execution risks related to a potential sale, both during the auction process and between the signing of a definitive agreement and the potential transaction close date.

# Loss of Benefits Related to Public Ownership

The privatization of PGW would necessitate a loss of City control currently exerted on PGW through the City Administration, City Council, the Philadelphia Gas Commission ("PGC") and the PFMC. Importantly, however, the primary role for regulating rates, safety and customer service would continue to reside with the PA PUC.

The introduction of a profit motive, distinct from public ownership, might also be viewed as a negative consideration. Additionally, the sale of PGW to a private entity would result in the loss of certain benefits inherent in public ownership (e.g., a cap on tort liability, the ability to fund PGW with tax-exempt financing, exemption from real estate taxes and the ability to impose municipal liens on delinquent properties); however, these costs have been, directly or indirectly, reflected in the Privatized PGW valuation analysis and purchase price and are therefore factored into the quantitative analysis described herein.

# Potential Future Contingent Liabilities

The privatization of PGW could result in future payments/contributions by the City in respect of certain other liabilities (e.g., potential future unfunded pension/OPEB liabilities, environmental liabilities, etc.) in the event that the City is unable to fully transfer responsibility for such liabilities to the buyer as part of the sale process. While such contingent liabilities currently reside with the City under public ownership, the ability for the City to recover costs (via rates) related to future contingent liabilities may be jeopardized after a PGW privatization.



#### IV**APPENDIX**

# A. PGW TIMELINE

The following timeline illustrates many of the significant PGW milestones as well as PGW-related risks the City has experienced as the historical owner of PGW. The prior decades have included fraud lawsuits against PGW executives, direct financial assistance from the City to restore PGW's financial solvency and various operational issues. Note that the City has hired advisors in the past, including in 1990 and 2001, to explore the privatization of PGW. It is our understanding that due to historical operational issues, financial distress, financial market conditions, and other factors, previous analyses concluded that a sale of PGW would not generate enough proceeds to retire the City's PGW-related Liabilities.

		PGW TIMELINE
	DATE	EVENT DESCRIPTION
	Feb 2012	■ Lazard completes its Strategic Assessment, concluding that the City should reserve the right to proceed with a privatization transaction if certain City objectives and policy criteria are achieved; expected valuation range of \$1.5 – \$1.9 billion assuming the Industry Benchmark Synergies Case
RECENT	Dec 2011	State regulators give a 334-count complaint to PGW, alleging the utility failed to take required steps to minimize the danger of a January 2011 accidental ignition of gas
	Jun 2011	■ The City keeps PGW's annual \$18 million Franchise Fee payment for the first time since 2003
2	Apr 2011	Fitch upgrades three tranches of PGW debt by one notch and assigns stable ratings outlook
	Mar 2011	<ul> <li>Craig White named PGW President and CEO, succeeding Tom Knudsen</li> </ul>
	Jan 2011	<ul> <li>A rupture in a 12-inch high pressure gas main causes an accidental natural gas explosion, killing one person and injuring five people</li> </ul>
	Jul 2010	■ The City hires Lazard to study the potential privatization of PGW
	Apr 2010	■ A gas leak creates a 12-ft. wide sinkhole and leads to the evacuation of 21 residents
	Mar 2010	<ul> <li>An underground gas explosion in West Philadelphia causes the evacuation of 50 people</li> </ul>
	Jan 2009	■ PGW customers' heating payments increase 5.2%, in part to cover required payments on an out-of-the-money derivative affecting \$310 million of bonds
	Aug 2008	■ PGW repays its \$45 million loan to the City, originally borrowed in 2001
	Dec 2006	PGW files to increase its ratebase by approximately \$100 million, which would increase the typical customer's bill by 9%; PA PUC approves a \$25 million increase in September 2007
2000s	Aug 2005	PA PUC unanimously rules that the 2002 and 2003 PGW gas shut-offs, which led to two deaths, were "egregious in nature" and raises penalties from \$22,250 to \$100,000
	Jan 2004	■ The City effectively suspends PGW's annual Franchise Fee due to its weak financial condition
	Nov 2003	<ul> <li>Governor Rendell signs the Responsible Utility Customer Protection Act, allowing PGW to sustain higher-than-historical collection rates because of more liberal shut-off policies and stricter deposit requirements</li> </ul>
	Mar 2003	■ The Philadelphia Ethics Commission issues a public rebuke and orders James Hawes III (former PGW CEO) to pay a \$22,000 fine for violating ethics laws
	Oct 2002	James Hawes III (former PGW CEO) is brought to trial in Common Pleas Court on employee theft and conspiracy charges; he is subsequently acquitted
	Jun 2002	■ Tom Knudsen confirmed as PGW President and CEO by PFMC



		PGW TIMELINE (cont'd)
	Jan 2002	<ul> <li>Deborah Estrin (former PGW VP of Human Resources) pleads guilty to misdemeanor theft for using corporate credit cards for personal expenses</li> </ul>
(Q,	Jul 2001	<ul> <li>PGW retains Lehman Brothers to study a potential sale or restructuring of the Company;</li> <li>the City ultimately decides not to proceed with a sale</li> </ul>
(CON	Dec 2000	A high-pressure gas pipeline erupts at PGW's Passyunk Avenue distribution center, cutting off service to more than 5,000 customers
2000s (CONT'D)	Oct 2000	A Philadelphia grand jury recommends that the District Attorney charge James Hawes III (former PGW CEO), Gregory Martin (former PGW COO), Ramon Sharbutt (former PGW CFO), and Deborah Perry Estrin (former PGW VP of Human Resources) with theft and misuse of millions in Company funds
	Oct 2000	Philadelphia City Council approves \$45 million loan to PGW
	Nov 1999	<ul> <li>Gregory Martin (PGW COO) is fired over a failed computerized billing replacement and using Company funds to install security equipment and ornamental lighting at his personal residence</li> </ul>
	Jul 1999	New \$15 million computerized billing system sends thousands of erroneous bills to customers and leaves customers unable to reach customer support
	Mar 1999	Gas explosion in Port Richmond injures 8 people
	Jan 1999	Ramon Sharbutt (PGW CFO) is fired after expensing personal costs to PGW
	Oct 1998	James Hawes III (PGW CEO) resigns following allegations about his misuse of PGW funds
	Jul 1997	<ul> <li>Darryl F. Jones, a former top finance official for PGW, is charged with embezzling approximately \$500,000 in cash payments by customers</li> </ul>
1990s	Jan 1996	James Hawes III, Gregory Martin and Ramon Sharbutt are confirmed to the positions of CEO, COO and CFO, respectively, by the Philadelphia Gas Commission after being selected by the Rendell Administration and nominated by the PFMC Board
	Dec 1995	<ul> <li>Nearly 600 school district employees are sent home early after fumes from a gas main leaked into an administration building</li> </ul>
	Sep 1995	<ul> <li>PGW averts technical default on its debt by borrowing \$21.4 million against future earnings</li> </ul>
	Oct 1994	■ PGW announces that its past-due bills amount to \$187 million at the end of July 1994 (~1/3 of annual revenue) and expects to write off \$39 million as uncollectible
	Aug 1993	1,800 union employees go on strike, leaving PGW with 25% of its normal staff to conduct daily operations
	Jan 1992	<ul> <li>Mayor Ed Rendell creates the Office of Management and Productivity to investigate the privatization of PGW; the City ultimately decides not to proceed with a sale</li> </ul>
	Feb 1991	The Philadelphia Gas Commission turns down a \$31 million rate increase for PGW, which would have increased the typical customer's bill by 12%
	Jul 1989	Robert J. Patrylo (PGW CEO) resigns; the post is not filled again until 1996
80s	Jun 1989	Pennsylvania Economy League study concludes that the City should sell PGW, potentially netting the City approximately \$200 million
1897 – 1980s	Jan 1988	A gas main explodes, destroying a house and injuring two residents
- 76	1980	PGW's annual Franchise Fee payment increases from \$15.5 million to \$18.0 million
189	Jan 1973	<ul> <li>Control of PGW is transferred to the PFMC; the PFMC begins paying a dividend of \$15.5 million to the City treasury annually</li> </ul>
	1897 – Dec 1972	PGW managed by United Gas Improvement Corporation, a private for-profit business



# B. SUPPORTING VALUATION MATERIALS

# 1. KEY ASSUMPTIONS FOR SELECTED VALUATION CASES (a)

	NO SYNERGIES CASE	MODERATE SYNERGIES CASE <sup>(b)</sup>	INDUSTRY BENCHMARK SYNERGIES CASE <sup>(b)</sup>	PREPAID OPEB CASE(b)
PGW RATES	Revenue forecast taken from PGW five year Forecast FY 2015 – FY 2019, except that the projected \$50 million rate increase in FY 2018 is not included; increases at inflation thereafter	Same as No Synergies Case (i.e., no base rate increase)	Same as No Synergies Case (i.e., no base rate increase)	Same as No Synergies Case (i.e., no base rate increase)
CAPITAL STRUCTURE	Debt-to-capitalization ratio: 50/50 Cost of long-term debt: 4.8% Cost of equity: 9.25%	Same as No Synergies Case	Same as No Synergies Case	Same as No Synergies Case
OPEX SYNERGIES	None	■ 14.0% reduction in non- fuel operational expenses phased in over two years, excluding OPEB, pension, retiree healthcare and bad debt expense, but including such portion of healthcare expenses attributable to current employees	28.0% reduction in non- fuel operational expenses phased in over two years, excluding OPEB, pension, and retiree healthcare, but including such portion of healthcare expenses attributable to current employees  14.0% reduction in bad debt expense, phased in over two years	Same as Industry Benchmark Synergies Case
PENSION EXPENSE RECOVERY	Includes continued recovery of pre-existing current amounts in rates; however, no future cash expenses are incurred since the buyer is assumed to have "pre-funded" unfunded pension liabilities (City receives funds at closing to discharge)	Same as No Synergies Case	■ Same as No Synergies Case	Same as No Synergies Case
OPEB EXPENSE RECOVERY	Includes continued recovery of pre-existing amounts in rates and continued funding at such levels by PGW (\$16 million in annual rate recovery and \$2.5 million in OPEB contributions)	Same as No Synergies Case	■ Same as No Synergies Case ■	Includes continued recovery of pre-existing amounts in rates and continued funding at such levels by PGW; however, no future cash expenses are incurred since the buyer is assumed to have "pre-funded" OPEB liabilities (City receives funds at closing to discharge)
CAPEX	Assumes PGW management forecast through 2019; adjusted for DSIC treatment <sup>©</sup> Assumes Privatized PGW earns a 10.0% ROE on the equity portion of \$22 million in annual DSIC-eligible capital expenditures (equity capitalization of 50.0%) <sup>©</sup>	Same as No Synergies Case	■ Same as No Synergies Case ■	Same as No Synergies Case
TAXES/ FRANCHISE FEE	State income tax (10.0%) Federal income tax (35.0%) BIRT(4) (1.415 mills on gross receipts and 6.43% of taxable net income) Real estate tax (1.34% on assessed property) Business use & occupancy tax (1.13% on assessed property) \$18 million annual Franchise Fee excluded from Privatized PGW expense projections	Same as No Synergies Case	■ Same as No Synergies Case ■	Same as No Synergies Case

- (a) (b) PGW Net PP&E ("Ratebase") at August 31, 2014 projected to be \$1,226 million.
- Privatization assumes the sale of a control position to a single acquiror.
- The DSIC, implemented under Act 11 of 2012, enables "the timely recovery of the reasonable and prudent costs incurred to repair, improve or replace eligible property in order to ensure and maintain adequate, efficient, safe, reliable and reasonable services." PGW currently receives direct/immediate reimbursement of its DSIC-related expenditures via rate increases. Privatized PGW is assumed to receive recovery on DSIC-related capital expenditures via traditional ratebase treatment, consistent with other investor-owned utilities in
- BIRT, per City legal analysis communicated to Lazard, applies only to gross receipts and net income that are not regulated by tariff of the (d) PA PUC or the Interstate Commerce Commission. The net income rate is set to decrease over time to 6.0% in 2023.



# 2. OVERVIEW OF KEY VALUATION DRIVERS

# Upside Factors:

- City economic growth beyond that contemplated in the PGW forecast
- Improved regulatory environment
- Further expansion of historically high premium valuation of Utility Industry relative to broader market
- Ability to recover costs on a timely basis (including bad debts, etc.)
- Opportunity for PGW to grow its institutional, commercial and industrial customer base due to favorable natural gas pricing for the foreseeable future and Philadelphia's geographic proximity to natural gas resources
- Lower cost of capital (e.g., lower cost of equity, lower cost of debt and/or higher leverage)
- Continuance of low interest rate environment
- Operational synergies/efficiencies
- Improved M&A environment
- Certainty regarding future collective bargaining agreements
- Ability to accelerate pipeline safety and replacement spending required under recently implemented Pennsylvania Act II or otherwise

#### Downside Factors:

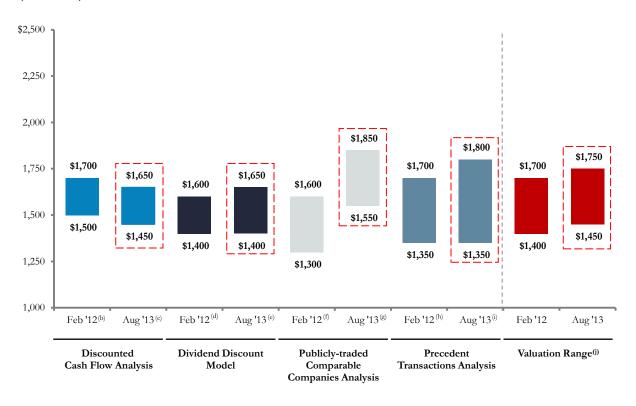
- Weaker-than-expected economic growth of the City
- Unstable/deteriorated regulatory environment
- Decline in historically high premium valuation of Utility Industry relative to broader market
- Inability to recover costs on a timely basis (including bad debts, etc.)
- Higher cost of capital/inability to earn cost of capital
- Rise in interest rates
- Increase in operating expenses
- Deterioration in M&A environment
- Inability to impose a lien on a customer's property for non-payment
  - While the loss of the ability to lien may impact the value of the Privatized PGW, Lazard's view is that the impact would likely be immaterial
- Uncertainty regarding future collective bargaining agreements
- Lack of tort claim protection



### 3. VALUATION COMPARISON

# VALUATION COMPARISON OF MODERATE SYNERGIES CASE (FEB 2012 VS. AUG 2013)(a)

#### (\$ in millions)



Source: PGW projections.

- (a) Illustrative ranges show Moderate Synergies Case, except where noted. The February 2012 valuation uses a 6.5% WACC, while the August 2013 valuation uses a 6.0% WACC. February 2012 valuation based on July 2011 PGW management plan; August 2013 valuation based on August 2013 PGW management plan.
- (b) Based on EBITDA exit multiple range of 6.5x 8.5x, P/E multiple range of 14.0x 17.0x, perpetuity growth range of 0.5% 1.5% and 2012E Net Debt of \$712 million.
- (c) Based on EBITDA exit multiple range of 7.75x 10.0x, P/E exit multiple range of 16.25x 18.25x, perpetuity growth range of 0.5% 1.5% and 2014E Net Debt of \$748 million. The reduction in DCF value relative to February 2012 was driven primarily by an increase in PGW's forecasted capital expenditures (some of which are recovered via the DSIC) and the related impact on free cash flow.
- (d) Based on ROE of 9.0% 11.0% and Terminal Growth Rate range of 0.5% 1.5%.
- (e) Based on ROE of 8.3% 10.3% and Terminal Growth Rate range of 0.5% 1.5%.
- (f) Based on 2013E EBITDA and net income (No Synergies Case) of \$168 million and \$68 million, respectively, and peer group benchmark EBITDA multiples of 6.5x 8.5x, net income multiples of 14.0x 17.0x and book value multiples of 1.3x 1.8x. Figures include a "control premium" of 15%.
- (g) Based on CY 2015E EBITDA and net income (No Synergies Case) of \$165 million and \$63 million, respectively, and peer group benchmark EBITDA multiples of 7.75x 10.0x, net income multiples of 16.25x 18.25x and book value multiples of 1.6x 2.2x. Figures include a "control premium" of 15%.
- (h) Based on 2013E EBITDA (No Synergies Case) of \$168 million and benchmark precedent transactions EBITDA multiples range of 8.0x –
- (i) Based on FY 2014E (No Synergies Case) EBITDA of \$167 million and FY 2015E EBITDA of \$166 million, benchmark precedent transactions LTM EBITDA multiple range of 8.5x 11.0x and NTM EBITDA multiple range of 8.0x 10.5x.
- (j) The Case reference ranges are derived from a rounded average of the four Valuation Methodologies.



# OVERVIEW OF CHANGES IN VALUE DRIVERS OF MODERATE SYNERGIES CASE (FEB 2012 VS. AUG 2013)

(\$ in millions)

, , , , , , , , , , , , , , , , , , ,	FEBRUARY 2012 FORECAST <sup>(a)</sup>	AUGUST 2013 FORECAST <sup>(b)</sup>	COMMENTARY	VALUE IMPACT(c)
EBITDA FORECAST	2013E: \$168 (0.9%) CAGR (2013 – 2022)	2015E: \$166 <sup>(d)</sup> (0.1%) CAGR (2015 – 2024)	Beginning year EBITDA projected to be lower than previous forecast due to increased administrative costs and pension expenses (albeit largely offset by other factors); future EBITDA projected to be slightly higher, largely due to DSIC-related revenues and reductions in forecasted OPEB expenses and health insurance	1
CAPEX FORECAST	Total: \$676  Total: \$970  Some general) projected to be highe than previous forecast. Valuation dr		· · · · · · · · · · · · · · · · · · ·	1
OPEX FORECAST	Total: \$3,051 2.2% CAGR (2013 – 2022)	Total: \$2,927 1.4% CAGR (2015 – 2024)	Total operating expenses projected to be moderately lower than previous forecast due to reductions in forecasted OPEB expenses and health insurance, among other factors (largely offset by increases in forecasted pension, marketing and bad debt expenses)	
WACC	6.0% - 6.8%	5.5% – 6.5%	Lower WACC primarily related to a decrease in the risk-free rate (i.e., interest rates on 10-year Treasury Bonds)	1
PUBLICLY- TRADED COMPARABLES	6.5x – 8.5x EV/2013E EBITDA	7.75x – 10.0x EV/2015E EBITDA	Increase in observed EV/EBITDA multiples for publicly-traded comparable companies driven largely by market performance and low interest rate environment	1
COMPARABLE TRANSACTIONS	8.0x – 10.0x NTM EBITDA	8.5x - 11.0x LTM EBITDA 8.0x - 10.5x NTM EBITDA	Moderate increase in observed EV/EBITDA multiples for comparable company transactions driven largely by market/investor demand dynamics	1
Summary Valuation Range <sup>(f)</sup> :	\$1,400 – \$1,700	\$1,450 – \$1,750		1

PGW management and projections. Source:

- Monetary figures represent aggregate amounts over the 2013 2022 period using the No Synergies Case.
- Monetary figures represent aggregate amounts over the 2015 2024 period using the No Synergies Case. Directional value impact driven by cumulative amount. (b)
- (c)
- PGW management forecast EBITDA adjusted for taxes, unfunded pension liability expenses and DSIC-related capital expenditures/reimbursement.
- Privatized PGW assumed to earn a 10.0% ROE on the equity portion of \$22 million in annual DSIC-eligible capital expenditures (50.0% equity capitalization).
- Summary valuation range based on Moderate Synergies Case.



#### 4. NON-FUEL OPERATING EXPENSE SYNERGIES

In order to determine the level of synergies assumed under each of the Moderate Synergies and Industry Benchmark Synergies Cases, Lazard examined precedent U.S. Electric & Gas Utility transactions (where expected synergy levels have been publicly disclosed). This analysis yielded synergy levels of approximately 28.0% of non-fuel operating and maintenance costs. Under the Industry Benchmark Synergies Case, Lazard applied this percentage cost reduction (28.0%) to selected budget line items that were deemed likely to be impacted, with the exception of bad debt expense, where a 14.0% reduction was applied. For the Moderate Synergies Case, half of this synergy estimate (14.0%) was assumed, and bad debt expense was left unchanged. In all cases, synergies were projected to be fully realized by 2016.

The following comparison details the reductions to non-fuel operating expenses assumed to be realized by 2016 (after a two-year phase-in) under each of the synergy scenarios indicated. In addition to non-fuel operating expenses, there are other areas where a prospective buyer could extract synergies (e.g., capital expenditure efficiencies, hedging activities, adoption of sophisticated tax-efficient corporate structures, cross-selling of existing products/services, etc.).

(\$ in millions)						
				IND	USTRY	
			DERATE	BENCHMARK		
		SYNER	GIES CASE	SYNERGIES CASE(a)		
	2016E PRIVATIZED PGW -NO	% CHANGE FROM NO SYNERGIES	2016E AMOUNT IN PRIVATIZED PGW -REVISED	% CHANGE FROM NO SYNERGIES	2016E AMOUNT IN PRIVATIZED PGW -REVISED	
ITEM DESCRIPTION	SYNERGIES	CASE	O&M	CASE	O&M	
Gas Processing	\$16,146	(14.0%)	\$13,886	(28.0%)	\$11,625	
Field Services	38,799	(14.0%)	33,367	(28.0%)	27,935	
Distribution	30,763	(14.0%)	26,456	(28.0%)	22,149	
Collection	3,418	(14.0%)	2,939	(28.0%)	2,461	
Customer Services	12,668	(14.0%)	10,894	(28.0%)	9,121	
Customer Accounting	8,077	(14.0%)	6,946	(28.0%)	5,815	
Bad Debt Expense	32,798	_	32,798	(14.0%)	28,206	
Marketing & Point-of-Sale Expenses	7,314	(14.0%)	6,290	(28.0%)	5,266	
Administrative & General	48,741	(14.0%)	41,917	(28.0%)	35,094	

(14.0%)

28,461

25,757

(12,025)

(8,357)

(28.0%)

23,828

25,757

(12,025)

(8,357)

33,094

25,757

(12,025)

(8,357)

NON-FUEL OPERATING EXPENSE SYNERGIES

Total 2016E Operating Expenses	\$267,882	(10.8%)	\$238,885	(23.3%)	\$205,356
Cost/Labor Savings	0	_	0	_	0
Other Post Employment Benefits (OPEBs)	9,518	_	9,518	_	9,518
Payroll Taxes	7,673	(14.0%)	6,599	(28.0%)	5,525
Pensions <sup>(b)</sup>	13,438	_	13,438	_	13,438

Source: PGW projections

Health Insurance - Active Employees

Health Insurance - Retirees

Capitalized Fringe Benefits

Capitalized Admin Charges

BT Supply Chain Initiative

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<sup>(</sup>a) The same level of synergies and their application is assumed in the Prepaid OPEB Case.

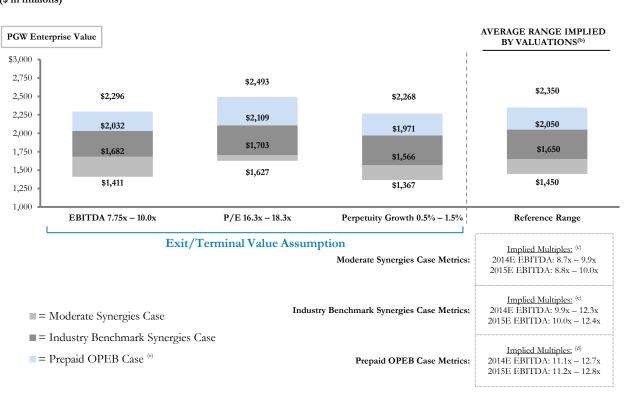
<sup>(</sup>b) Pension expenses reduced by \$16 million per year (to ~\$13 million net) as all cases assume the buyer prepays unfunded pension liabilities (to fully fund the pension at closing) and continues to recover these prepaid expenses in rates.



#### 5. DCF VALUATION SUMMARY

# DCF VALUATION(a)

#### (\$ in millions)



Source: PGW projections.

(a) Based on public market multiples. Valuation assumes a 6.00% WACC.

(b) The Case reference ranges are derived from a rounded average of the three exit/terminal value assumption Methodologies.

(c) Based on CY 2014E (No Synergies Case) EBITDA of \$166 million and CY 2015E (No Synergies Case) EBITDA of \$165 million.

(d) Based on CY 2014E and CY 2015E EBITDA of \$185 million and \$183 million, respectively, which represent the No Synergies Case EBITDA plus an OPEB expense offset of \$18.5 million.

(e) The higher valuation resulting in the Prepaid OPEB Case of approximately \$450 million assumes the buyer pays the City up front (as part of the purchase price) the unfunded OPEB liability, that this future liability is assumed/retained, and subsequently discharged, by the City, and that the buyer is able to retain in rates the amounts currently authorized for unfunded OPEB expense recovery.



# WACC ANALYSIS

#### (\$ in millions)

		Stock Price	Equity	Net	Debt/	Net Debt/	Net Debt/	Levered	Unlevered
PGW Comparables		08/01/13	Value	Debt	Book Cap.	Ent. Value	Equity Value	Beta (a)	Beta (b)
AGL Resources	GAS	\$46.44	\$5,527	\$4,244	54.4%	43.4%	76.8%	0.56	0.38
Atmos Energy	ATO	45.19	4,092	2,623	51.4%	39.1%	64.1%	0.57	0.42
Chesapeake Utilities	CPK	59.69	583	151	37.1%	20.5%	25.8%	0.45	0.39
Ladede Group	LG	45.90	1,501	858	44.2%	36.4%	57.2%	0.50	0.37
National Fuel Gas	NFG	66.69	5,663	1,632	46.1%	22.4%	28.8%	0.92	0.79
New Jersey Resources	NJR	45.33	1,902	818	47.9%	30.1%	43.0%	0.56	0.45
Northwest Natural	NWN	44.26	1,194	814	52.1%	40.5%	68.2%	0.53	0.38
Piedmont Natural Gas	PNY	34.95	2,639	1,394	56.1%	34.6%	52.8%	0.61	0.47
South Jersey Industries	SJI	61.75	1,974	866	52.9%	30.5%	43.9%	0.58	0.46
Southwest Gas	SWX	49.81	2,310	1,225	47.6%	34.6%	53.0%	0.58	0.44
WGL	WGL	46.80	2,420	792	35.6%	24.7%	32.7%	0.59	0.50
Median					47.9%	34.6%	52.8%	0.57	0.44

41.5%
2.72%
6.70%
1.85%

	Me	dian		
Debt/	Unlevered	Levering	Levered	Cost of
Equity	Beta	Factor (g)	Beta	Equity (h)
0.00%	0.44	1.00	0.44	7.54%
11.11%	0.44	1.07	0.47	7.73%
25.00%	0.44	1.15	0.51	7.97%
42.86%	0.44	1.25	0.55	8.28%
66.67%	0.44	1.39	0.62	8.70%
100.00%	0.44	1.59	0.70	9.27%
150.00%	0.44	1.88	0.83	10.14%
233.33%	0.44	2.37	1.05	11.59%
400.00%	0.44	3.34	1.48	14.48%
	Equity 0.00% 11.11% 25.00% 42.86% 66.67% 100.00% 233.33%	Debt/         Unlevered           Equity         Beta           0.00%         0.44           11.11%         0.44           25.00%         0.44           42.86%         0.44           66.67%         0.44           100.00%         0.44           233.33%         0.44	Debt/         Unlevered         Levering           Equity         Beta         Factor (6)           0.00%         0.44         1.00           11.11%         0.44         1.07           25.00%         0.44         1.15           42.86%         0.44         1.25           66.67%         0.44         1.39           100.00%         0.44         1.59           150.00%         0.44         1.88           233.33%         0.44         2.37	Equity         Beta         Factor (6)         Beta           0.00%         0.44         1.00         0.44           11.11%         0.44         1.07         0.47           25.00%         0.44         1.15         0.51           42.86%         0.44         1.25         0.55           66.67%         0.44         1.39         0.62           100.00%         0.44         1.59         0.70           150.00%         0.44         1.88         0.83           233.33%         0.44         2.37         1.05

Pre-Tax/After-Tax Cost of Debt						
4.00%	4.38%	4.75%	5.13%	5.50%		
2.34%	2.56%	2.78%	3.00%	3.22%		

	Weighted Average Cost of Capital (i)					
7.54%	7.54%	7.54%	7.54%	7.54%		
7.19%	7.21%	7.24%	7.26%	7.28%		
6.85%	6.89%	6.93%	6.98%	7.02%		
6.50%	6.57%	6.63%	6.70%	6.76%		
6.15%	6.24%	6.33%	6.42%	6.50%		
5.81%	5.92%	6.03%	6.14%	6.25%		
5.46%	5.59%	5.72%	5.86%	5.99%		
5.11%	5.27%	5.42%	5.58%	5.73%		
4.77%	4.94%	5.12%	5.29%	5.47%		

Source: Barra, FactSet and Ibbotson's.

- (a) Betas as of August 1, 2013.
- (b) Unlevered Beta = Levered Beta/[1+(1-Tax Rate)(Debt/Equity)].
- (c) Blended tax rate of federal, state and City taxes.
- (d) Risk Free Rate is 10-Year Treasury Bond Yield as of August 1, 2013.
- (e) Represents the long-horizon expected equity risk premium based on differences of historical arithmetic mean returns on the S&P 500 from 1926 2012 (Ibbotson Associates' 2013 Yearbook).
- (f) Equity Size Premium taken from Ibbotson 2013 Yearbook based on returns in excess of CAPM from January 1926 to December 2012. Premium for companies with equity capitalization between \$514 million and \$1.9 billion is 1.9%.
- (g) Levering Factor = [1 + (1-Tax Rate)(Debt/Equity)].
- (h) Cost of Equity = (Risk Free Rate of Return)+(Levered Beta)(Equity Risk Premium)+Equity Size Premium.
  - Weighted Average Cost of Capital = (After-Tax Cost of Debt)(Debt/Cap.)+(Cost of Equity)(Equity/Cap.).



# DISCOUNTED CASH FLOW ANALYSIS: NO SYNERGIES CASE

# (\$ in millions)

EBITDA

Less: Deprecation and Amortization EBIT

Less: Taxes at 41% EBIT After Tax

Plus: Depreciation and Amortization

Less: Capital Expenditures
Plus/(Minus): Other Investments

Plus/(Minus): Changes in Working Capital Unlevered Free Cash Flow

2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
\$167	\$166	\$163	\$159	\$157	\$154	\$154	\$156	\$159	\$161	\$164	\$164
(41)	(45)	(47)	(50)	(52)	(54)	(57)	(58)	(60)	(62)	(64)	(57
\$126	\$121	\$116	\$110	\$105	\$100	\$97	\$98	\$98	\$99	\$99	\$108
0	(35)	(32)	(29)	(26)	(23)	(21)	(21)	(21)	(21)	(21)	(45
\$126	\$86	\$84	\$81	\$79	\$77	\$76	\$77	\$77	\$78	\$79	\$63
41	45	47	50	52	54	57	58	60	62	64	57
(105)	(93)	(95)	(94)	(94)	(94)	(96)	(98)	(100)	(102)	(104)	(57
0	0	0	0	0	0	0	0	0	0	0	(
(14)	0	4	0	(6)	(3)	(2)	(2)	(2)	(2)	(2)	(2
\$48	\$38	\$40	\$37	\$32	\$34	\$34	\$35	\$35	\$36	\$37	\$60

'15 -'24 CAGR (0.4%) (0.0%) (5.2%)

Discount	
Rate	
5.50%	
5.75%	
6.00%	
6.25%	
6.50%	

Г	PV	
	of FCF	
	'15 - '24	
	\$278	
	275	
	272	
	269	
ĺ	266	

	Enterprise	
	Value	
7.75x	8.88x	10.00x
\$1,023	\$1,132	\$1,240
1,003	1,109	1,215
983	1,086	1,190
964	1,065	1,166
945	1,043	1,142

Discount	
Rate	
5.50%	
5.75%	
6.00%	
6.25%	
6.50%	

PV of Terminal Value at Forward P/E Exit Multiple			
16.25x	17.25x	18.25x	
\$846	\$872	\$897	
826	851	876	
807	831	856	
788	812	836	
770	793	816	

	Enterprise	
	Value	
16.25x	17.25x	18.25x
\$1,123	\$1,149	\$1,175
1,101	1,126	1,151
1,079	1,103	1,128
1,057	1,081	1,105
1.036	1,059	1,083

Discount	
Rate	
5.50%	
5.75%	
6.00%	
6.25%	
6.50%	

PV of Terminal FCF in TY at Growth Rate of						
0.50%	1.00%	1.50%				
\$708	\$787	\$885				
659	728	814				
614	676	751				
574	628	695				
537	586	645				

	Enterprise Value	
0.50%	1.00%	1.50%
\$986	\$1,065	\$1,163
933	1,003	1,088
886	947	1,022
843	897	964
803	852	911



# DISCOUNTED CASH FLOW ANALYSIS: MODERATE SYNERGIES CASE

#### (\$ in millions)

#### EBITDA

Less: Depreciation and Amortization

EBIT Less: Taxes at 41% EBIT After Tax

Plus: Deprecation and Amortization Less: Capital Expenditures Plus/(Minus): Other Investments

Plus/(Minus): Changes in Working Capital Unlevered Free Cash Flow

2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
\$167	\$180	\$192	\$193	\$197	\$199	\$202	\$205	\$208	\$212	\$215	\$216
(41)	(45)	(47)	(50)	(52)	(54)	(57)	(58)	(60)	(62)	(64)	(59)
\$126	\$135	\$145	\$144	\$145	\$145	\$145	\$147	\$148	\$149	\$151	\$157
0	(36)	(40)	(38)	(38)	(37)	(37)	(37)	(37)	(37)	(37)	(65)
\$126	\$99	\$106	\$106	\$107	\$108	\$108	\$110	\$111	\$112	\$113	\$92
41	45	47	50	52	54	57	58	60	62	64	59
(105)	(93)	(95)	(94)	(94)	(94)	(96)	(98)	(100)	(102)	(104)	(59)
0	0	0	0	0	0	0	0	0	0	0	0
(14)	0	4	0	(6)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
\$48	\$51	\$61	\$61	\$59	\$64	\$65	\$66	\$67	\$69	\$70	\$88
										-	

'15 -'24 CAGR 2.7% 0.0% (1.3%)

Discount Rate	
5.50%	
5.75%	
6.00%	
6.25%	

	Enterprise	
	Value	
7.75x	8.88x	10.00x
\$1,467	\$1,609	\$1,752
1,438	1,577	1,717
1,411	1,546	1,682
1,384	1,516	1,649
1,357	1,487	1.616

Discount Rate
5.50%
5.75%
6.00%
6.25%
6.50%

PV of Terminal Value at								
Forward P/E Exit Multiple								
16.25x	17.25x	18.25x						
\$1,209	\$1,248	\$1,288						
1,180	1,219	1,257						
1,153	1,190	1,228						
1,126	1,163	1,200						
1,100	1,136	1,172						

	Enterprise	
	Value	
16.25x	17.25x	18.25x
\$1,694	\$1,733	\$1,773
1,660	1,699	1,737
1,627	1,665	1,703
1,595	1,632	1,669
1 564	1.600	1.636

Discount
Rate
5.50%
5.75%
6.00%
6.25%
6.50%

	Enterprise	
	Value	
0.50%	1.00%	1.50%
\$1,515	\$1,629	\$1,772
1,437	1,538	1,663
1,367	1,457	1,566
1,303	1,383	1,479
4.045	1.217	4.404



# DISCOUNTED CASH FLOW ANALYSIS: INDUSTRY BENCHMARK SYNERGIES CASE

#### (\$ in millions)

EBITDA

Less: Depreciation and Amortization

Less: Taxes at 41% EBIT After Tax

Plus: Depreciation and Amortization

Less: Capital Expenditures

Plus/(Minus): Other Investments Plus/(Minus): Changes in Working Capital

Unlevered Free Cash Flow

2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
\$167	\$197	\$226	\$226	\$228	\$230	\$233	\$237	\$241	\$245	\$249	\$251
(41)	(45)	(47)	(50)	(52)	(54)	(57)	(58)	(60)	(62)	(64)	(59)
\$126	\$152	\$179	\$176	\$176	\$176	\$177	\$179	\$181	\$183	\$185	\$191
0	(40)	(50)	(49)	(48)	(47)	(47)	(47)	(47)	(48)	(48)	(79)
\$126	\$112	\$129	\$128	\$129	\$129	\$130	\$132	\$133	\$135	\$137	\$112
41	45	47	50	52	54	57	58	60	62	64	59
(105)	(93)	(95)	(94)	(94)	(94)	(96)	(98)	(100)	(102)	(104)	(59)
0	0	0	0	0	0	0	0	0	0	0	0
(14)	0	4	0	(6)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
\$48	\$64	\$84	\$83	\$81	\$85	\$86	\$88	\$90	\$91	\$93	\$108

CAGR 4.4% 0.0% 0.7%

Discount Rate 5.75% 6.00% 6.25% 6.50%

of FCF '15 - '24 641 633 619

PV of Terminal Value at Forward EBITDA Exit Multiple 7.75x 8.88x 10.00x\$1,13 1,271 1,432 1,399 1,084 1,241 1,059 1,366 1,034 1,184 1,335

Enterprise Value 7.75x 8.88x 10.00x\$1,784 1,751 1,718 1,685 2,073 2,032 1,993 1,912 1,875 1,839 1,654 1,804 1,954

Discount Rate 5.50% 5.75% 6.00% 6.25% 6.50%

PV of FCF **'**15 - **'**24 \$648 641 633 626

PV of Terminal Value at Forward P/E Exit Multiple \$1,450 \$1,499 \$1,547 1,417 1,511 1,464 1,383 1,351 1,430 1,476 1.396 1.442

Enterprise Value 16.25x 17.25x \$2,147 18.25x \$2,195 \$2,098 2,057 2,017 1,978 2,152 2,104 2,063 2,109 2.023 2.068 1,939

Discount Rate 5.50% 5.75% 6.00% 6.25% 6.50%

of FCF '15 - '24 \$648 641 633 626 619

PV of Terminal FCF in TY at Growth Rate of 0.50% 1.00% \$1,262 \$1,402 \$1,578 1,174 1,094 1,298 1,450 1,338 1,204 1,023 957 1,120 1,238 1,044 1,149

Enterprise Value 1.00% 1.50% 0.50% \$1,910 \$2,050 \$2,226 1,815 1,728 1,649 1,577 1,938 1,837 2,091 1,971 1,864 1,746 1,768



# DISCOUNTED CASH FLOW ANALYSIS: PREPAID OPEB CASE(a)

#### (\$ in millions)

EBITDA

Less: Depreciation and Amortization EBIT

Less: Taxes at 41% EBIT After Tax

Plus: Depreciation and Amortization

Less: Capital Expenditures

Plus/(Minus): Other Investments Plus/(Minus): Changes in Working Capital

Unlevered Free Cash Flow

2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
\$185	\$215	\$244	\$244	\$247	\$249	\$252	\$256	\$260	\$264	\$268	\$269
(41)	(45)	(47)	(50)	(52)	(54)	(57)	(58)	(60)	(62)	(64)	(59)
\$145	\$171	\$197	\$195	\$195	\$194	\$195	\$197	\$199	\$201	\$203	\$210
0	(37)	(48)	(46)	(45)	(44)	(44)	(44)	(45)	(45)	(46)	(87)
\$145	\$133	\$150	\$149	\$150	\$150	\$151	\$153	\$154	\$156	\$158	\$123
41	45	47	50	52	54	57	58	60	62	64	59
(105)	(93)	(95)	(94)	(94)	(94)	(96)	(98)	(100)	(102)	(104)	(59)
0	0	0	0	0	0	0	0	0	0	0	0
(14)	0	4	0	(6)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
\$66	\$85	\$105	\$104	\$102	\$106	\$107	\$109	\$111	\$112	\$114	\$119

'15 - '24 CAGR 0.0% 0.8%

Discount 5.50% 5.75% 6.25% 6.50%

of FCF '15 - '24 \$811 802 784

PV of Terminal Value at Forward EBITDA Exit Multiple \$1,221 \$1,398 \$1,575 1,539 1,192 1,365 1,503 1 1 3 7 1,303 1,468 1,434

Enterprise Value 10.00x \$2.032 \$2,209 \$2,380 1,994 1,957 1,922 2,167 2,340 2.252 2,087

Discount Rate 5.50% 5.75% 6.00% 6.50%

PV of FCF '15 - '24 802 793

PV of Terminal Value at Forward P/E Exit Multiple 16.255 17.25x 18.25x \$1,668 1,629 1,740 1,591 1,645 1,700

Enterprise 16.25x 17.25x 18.25x \$2,478 \$2,593 2,430 2,383 2,338 2.438 2,493 2,444

Discount Rate 5.50% 5.75% 6.00% 6.25% 6.50%

of FCF **'15 - '24** \$811 802 793 784

PV of Terminal FCF in TY at Growth Rate of 0.50% 1.00% 1.50% \$1,740 \$1,392 \$1,546 1,295 1,431 1,599 1,207 1,127 1,328 1,235 1,475 1,365

Enterpris Value 1.00% \$2,357 0.50% 1.50% \$2,203 \$2,551 2,096 2,000 1,912 2,233 2,401 2,120 2,019 2,268 2,149

Source: (a)

The higher valuation resulting in the Prepaid OPEB Case of approximately \$450 million assumes the buyer pays the City up front (as part of the purchase price) the unfunded OPEB liability, that this future liability is assumed/retained, and subsequently discharged, by the City, and that the buyer is able to retain in rates the amounts currently authorized for unfunded OPEB expense recovery.



# 6. DDM VALUATION SUMMARY

# DIVIDEND DISCOUNT MODEL: NO SYNERGIES CASE

# (\$ in millions)

Dividends Terminal Value Cash Flow to Equity Dividends

2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
NA	\$64	\$60	\$55	\$52	\$47	\$45	\$45	\$45	\$44	\$44	\$44
											503
-	64	60	55	52	47	45	45	45	44	44	
NA	\$64	\$60	\$55	\$52	\$47	\$45	\$45	\$45	\$44	\$44	

Present Value of Future Dividends

\$314

Present Value of Terminal Value

\$220

Target
Return
8.25%
8.75%
9.25%
9.75%
10.25%

PV of
Dividends
'15 - '24
\$329
322
314
307
301

ſ	PV of Terminal Value									
	Assuming Perpetual Growth Rate of									
Ī	0.50%	1.00%	1.50%							
ſ	\$257	\$275	\$295							
	231	245	262							
	208	220	234							
	188	198	210							
	170	179	190							

2014 Net Debt
\$518
518
518
518
518

Е	nterprise Val	ue						
Assuming Perpetual Growth Rate of								
0.50%	1.00%	1.50%						
\$1,104	\$1,122	\$1,142						
1,070	1,085	1,102						
1,040	1,053	1,067						
1,013	1,024	1,036						
989	998	1,009						

# DIVIDEND DISCOUNT MODEL: MODERATE SYNERGIES CASE

# (\$ in millions)

Dividends Terminal Value Cash Flow to Equity Dividends

2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
NA	\$66	\$71	\$69	\$68	\$67	\$67	\$67	\$67	\$67	\$67	\$68
											775
-	66	71	69	68	67	67	67	67	67	67	
NA	\$66	\$71	\$69	\$68	\$67	\$67	\$67	\$67	\$67	\$67	

Present Value of Future Dividends \$412

Present Value of Terminal Value

\$339

Target	
Return	
8.25%	
8.75%	
9.25%	
9.75%	
10.25%	

PV of		PV of Terminal Value							
vidends	+	Assuming Perpetual Growth Rate							
5 - '24		0.50%	1.00%	1.50%					
\$432		\$396	\$423	\$455					
422		355	378	404					
412		320	339	361					
402		289	306	324					
392		262	276	292					

	2014 Net Debt
Γ	\$748
	748
	748
	748
	748

Enterprise Value									
Assuming Perpetual Growth Rate of									
0.50%	1.00%	1.50%							
\$1,577	\$1,604	\$1,635							
1,525	1,548	1,574							
1,480	1,499	1,521							
1,439	1,456	1,474							
1.403	1.417	1 422							



# DIVIDEND DISCOUNT MODEL: INDUSTRY BENCHMARK SYNERGIES CASE

#### (\$ in millions)

Dividends Terminal Value Cash Flow to Equity Dividends

-												
	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
_	NA	\$71	\$86	\$83	\$82	\$81	\$80	\$81	\$82	\$82	\$83	\$83
												951
	-	71	86	83	82	81	80	81	82	82	83	
	NA	\$71	\$86	\$83	\$82	\$81	\$80	\$81	\$82	\$82	\$83	

Present Value of Future Dividends

\$491

Present Value of Terminal Value

\$416

Target Return 8.25% 8.75% 9.25% 9.75% 10.25%

Dividend '15 - '24 \$516 503 491 479 468

PV of Terminal Value 0.50% 1.00% \$486 \$520 \$558 436 464 496 393 416 443 355 375 398 322 339

Enterprise Value 0.50% 1.00% 1.50% \$1,914 1,851 1.880 1.912 1,796 1,820 1,847 1,746 1,767 1,789 1.739

# DIVIDEND DISCOUNT MODEL: PREPAID OPEB CASE(a)

2017E

#### (\$ in millions)

Dividends Terminal Value Cash Flow to Equity Dividends

NA

2014E

2015E

\$86

\$86

2016E

\$101

101

\$101

Present Value of Future Dividends

\$582

Present Value of Terminal Value

Target

\$492

	PV of
Target	Dividends
Return	'15 - '24
8.25%	\$612
8.75%	597
9.25%	582
9.75%	568
10.25%	555

PV	PV of Terminal Value							
Assuming	Assuming Perpetual Growth Rate of							
0.50%	1.00%	1.50%						
\$575	\$614	\$660						
515	549	586						
464	492	524						
419	443	470						
380	401	424						

2018E

\$97

2019E

\$96

2020E

\$96

2021E

2022E

\$97

	2014 Net Debt
	\$1,038
	1,038
	1,038
	1,038
ı	1.038

E	nterprise Val	ue							
Assuming I	Assuming Perpetual Growth Rate of								
0.50%	1.00%	1.50%							
\$2,225	\$2,264	\$2,310							
2,150	2,184	2,222							
2,085	2,113	2,145							
2,026	2,050	2,077							
1.073	1.004	2.017							

2024E

\$98

98

\$98

TY

\$98

1,124

2023E

\$97

Source:

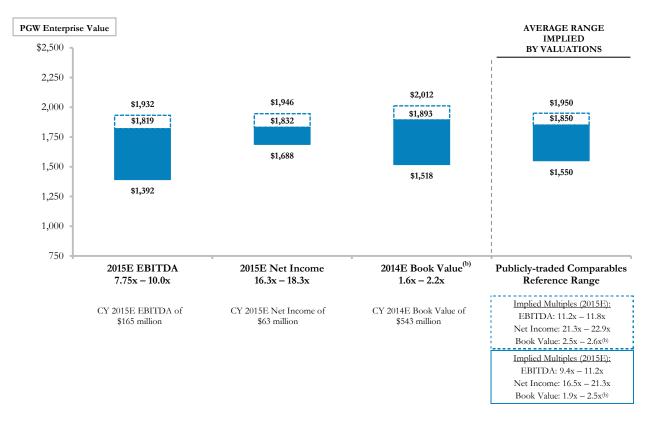
The higher valuation resulting in the Prepaid OPEB Case of approximately \$450 million assumes the buyer pays the City up front (as part of the purchase price) the unfunded OPEB liability, that this future liability is assumed/retained, and subsequently discharged, by the City, and that the buyer is able to retain in rates the amounts currently authorized for unfunded OPEB expense recovery.



# 7. PUBLICLY-TRADED COMPARABLE COMPANY MULTIPLES

# PUBLICLY-TRADED COMPARABLE COMPANY MULTIPLES(a)

# (\$ in millions)



■= 15% Control Premium

□ = 25% Control Premium

Source:

PGW projection.

Based on CY 2014E No Synergies Case net debt of \$518 million and book value of \$543 million.

<sup>(</sup>a) The No Synergies Case was used to reflect the pre-synergy/efficiency condition of publicly-traded comparable companies.



# NORTH AMERICA GAS UTILITY COMPARABLE COMPANY TRADING ANALYSIS(a)

# (\$ in millions)

				Pric	e /		Ent	erprise V	alue	2013E		I/B/E/S		2013E PE/	Debt/
	Equity	Enterprise	I/	B/E/S E	PS	Book		EBITDA		Dividend	Dividend	Long-Term	Total	Total	2013E
Company Name	Value	Value	2013E	2014E	2015E	Value	2013E	2014E	2015E	Payout	Yield	Growth Rate	Return	Return	EBITDA
AGL Resources	\$5,527	\$9,771	17.6x	16.7x	15.8x	1.6x	8.7x	8.4x	8.1x	70.7%	4.0%	5.0%	9.0%	1.95x	3.9x
Atmos Energy	4,092	6,715	17.9x	17.1x	NA	1.6x	8.7x	8.0x	7.5x	55.6%	3.1%	6.0%	9.1%	1.97x	3.5x
Chesapeake Utilities	583	733	17.4x	17.0x	16.8x	2.2x	8.2x	7.9x	7.3x	44.4%	2.6%	6.0%	8.6%	2.03x	1.8x
Ladede Group	1,501	2,359	16.6x	15.7x	14.5x	1.4x	14.0x	9.0x	8.5x	61.4%	3.7%	4.6%	8.3%	2.01x	5.1x
National Fuel Gas	5,663	7,294	21.5x	20.7x	19.5x	2.8x	8.4x	7.7x	7.3x	46.9%	2.2%	9.5%	11.7%	1.83x	2.0x
New Jersey Resources	1,902	2,720	17.0x	16.4x	NA	2.1x	13.5x	13.0x	NA	60.4%	3.5%	4.5%	8.0%	2.12x	4.1x
Northwest Natural	1,194	2,008	19.7x	18.8x	17.7x	1.6x	9.0x	8.7x	8.5x	81.6%	4.1%	3.8%	7.9%	2.51x	3.7x
Piedmont Natural Gas	2,639	4,034	20.1x	18.7x	17.6x	2.4x	12.3x	11.1x	11.7x	70.7%	3.5%	6.0%	9.5%	2.10x	4.3x
South Jersey Industries	1,974	2,839	19.3x	17.8x	16.9x	2.5x	15.4x	14.2x	12.8x	56.6%	2.9%	6.0%	8.9%	2.18x	4.7x
Southwest Gas	2,310	3,535	17.1x	16.4x	15.8x	1.7x	7.1x	6.8x	6.6x	42.2%	2.7%	5.5%	8.2%	2.10x	2.5x
WGL	2,420	3,213	18.4x	17.3x	NA	1.8x	9.0x	8.3x	8.0x	65.4%	3.6%	3.2%	6.8%	2.70x	2.2x
		High	21.5x	20.7x	19.5x	2.8x	15.4x	14.2x	12.8x	81.6%	4.1%	9.5%	11.7%	2.70x	5.1x
		Mean	18.4x	17.5x	16.8x	2.0x	10.4x	9.4x	8.6x	59.6%	3.3%	5.5%	8.7%	2.14x	3.4x
		Median	17.9x	17.1x	16.9x	1.8x	9.0x	8.4x	8.0x	60.4%	3.5%	5.5%	8.6%	2.10x	3.7x
		Low	16.6x	15.7x	14.5x	1.4x	7.1x	6.8x	6.6x	42.2%	2.2%	3.2%	6.8%	1.83x	1.8x

2014E EBITD	A MULTIPLE	2014E NET INCO	BOOK VALUE MULTIPLE		
LOW	HIGH	LOW	HIGH	LOW	HIGH
(25th Percentile)	(75th Percentile)	(25th Percentile)	(75th Percentile)	(25th Percentile)	(75th Percentile)
7.75x	10.0x	16.3x	18.3	1.6x	2.2x



# 8. PRECEDENT TRANSACTION MULTIPLES

# SELECTED NATURAL GAS DISTRIBUTION M&A COMPARABLE TRANSACTIONS

# (\$ in millions)

			Equity		Purchase Price			rchase Price	
Announcement Date	Ai	T	Purchase Price	Transaction Value	1-Week	ment Prices 1-Day	LTM EBITDA	NTM	Forward Earnings
	Acquiror	Target							
5/28/2013	TECO Energy	New Mexico Gas Company	\$750 NA	\$950	NA	NA	11.0x	NA	NA
2/11/2013	Algonquin Power & Utilities	New England Gas Co		74	NA	NA	NA	7.8x	NA
12/19/2012	SteelRiver Infrastructure Fund	Equitable Gas Co and Equitable Homeworks	1,120	1,120	NA	NA	12.2x	NA	NA
12/14/2012	Laclede Group Inc	Missouri Gas Energy & New England Gas Co	1,015	1,035	NA	NA	10.4x	NA	NA
8/8/2012	Liberty Energy	Atmos Energy Corp Distribution Assets	NA	141	NA	NA	NA	8.9x	NA
2/1/2012	AltaGas	Semco Holding	780	1,135	NA	NA	NA	NA	NA
6/16/2011	Energy Transfer Equity	Southern Union Co	5,556	5,561	56.6%	51.0%	13.9x	NA	NA
5/13/2011	Liberty Energy	Atmos Energy's Natural Gas Operations	NA	128	NA	NA	NA	NA	NA
12/9/2010	Algonquin Power & Utilities	Granite State Electric & EnergyNorth Natural Gas	285	394	NA	NA	16.9x	NA	NA
12/7/2010	AGL Resources	Nicor	2,383	3,113	21.0%	11.9%	6.7x	7.7x	18.1x
5/25/2010	UIL	Iberdrola USA's New England Gas Utilities	885	1,296	NA	NA	9.4x	NA	NA
4/20/2009	Chesapeake Utilities	Florida Public Utilities	75	134	24.5%	17.3%	7.8x	NA	NA
7/28/2008	Sempra Energy	EnergySouth	509	831	38.8%	22.6%	18.2x	12.6x	NA
7/2/2008	SteelRiver Infrastructure Fund	Dominion Peoples	780	NA	NA	NA	NA	NA	NA
7/1/2008	MDU Resources	Intermountain Gas Company	233	328	NA	NA	12.1x	NA	NA
1/12/2008	Continental Energy Systems	PNM Gas Services	620	620	NA	NA	10.6x	NA	NA
1/12/2008	PNM Resources	Continental and Cap Rock Holding	203	NA	NA	NA	NA	NA	NA
11/14/2007	SourceGas	Arkansas Western Gas Company	230	NA	NA	NA	NA	NA	NA
2/23/2007	Cap Rock Holding Corporation	SEMCO Energy	289	804	37.0%	35.8%	9.6x	8.8x	25.5x
8/14/2006	GE Energy Financial Services / Alinda	Kinder Morgan Retail	710	NA	NA	NA	NA	NA	NA
7/10/2006	WPS Resources	Peoples Energy	1,592	2,577	14.5%	15.0%	9.1x	8.0x	18.7x
7/9/2006	MDU Resources	Cascade Natural Gas	305	456	25.3%	23.5%	9.2x	8.4x	NA
3/1/2006	Equitable Resources	Dominion Peoples and Dominion Hope	970	NA	NA	NA	NA	NA	NA
2/27/2006	National Grid	KeySpan	7,391	11,874	16.8%	16.1%	9.2x	8.6x	17.1x
2/16/2006	National Grid USA	NECG- Rhode Island	498	575	NA	NA	10.4x	NA	NA
1/27/2006	UGI Corporation	PG Energy	580	NA	NA	NA	NA	NA	NA
9/21/2005	Empire District Electric	Missouri Gas (Aquila)	84	NA	NA	NA	NA	NA	NA
9/21/2005	WPS Resources	Michigan Gas (Aquila)	270	NA	NA	NA	NA	NA	NA
9/21/2005	WPS Resources	Minnesota Gas (Aquila)	288	NA	NA	NA	NA	NA	NA
7/15/2004	AGL Resources	NUI	222	678	1.9%	9.5%	14.7x	9.7x	18.3x
6/17/2004	Atmos Energy	TXU Gas	1,199	1,925	NA	NA	12.1x	8.8x	NA
				All Preceder	_				
				High	56.6%	51.0%	18.2x	12.6x	25.5x
				Median Low	24.5%	17.3% 9.5%	10.5x 6.7x	8.7x 7.7x	18.3x 17.1x

LTM EBITDA	MULTIPLE	ENTERPRI	SE VALUE <sup>(a)</sup>	
LOW	HIGH	LOW	HIGH	
8.5x	11.0x	\$1,450	\$1,850	
NTM EBITDA	MULTIPLE(b)	ENTERPRI	SE VALUE(c)	
LOW	HIGH	LOW	HIGH	
8.0x	10.5x	\$1,350	\$1,750	
	_	AVERAGE O	F LTM/NTM	
		LOW	HIGH	
		\$1,350	\$1,800	

Source:

SDC and Company filings.
Based on FY 2014E EBITDA (No Synergies Case) of \$167 million.

Where NTM EBITDA transaction statistics are unavailable, LTM EBITDA multiples are substituted by reducing the multiple by 0.5x to (b) account for year-over-year growth.

Based on FY 2015E EBITDA (No Synergies Case) of \$166 million.



#### C. DEFEASANCE ANALYSIS

#### **Debt Defeasance Costs**

Under the Internal Revenue Code and PGW's bond ordinance, if a private entity assumes ownership of the Company, it would be necessary to legally discharge (defease) PGW's outstanding bonds and related interest rate swap and other derivatives. This is accomplished by the City depositing a portion of the sale proceeds into an escrow fund invested in Treasury obligations to pay interest and principal on PGW's tax-exempt bond issues until their respective first call dates. M.R. Beal performed a debt defeasance analysis to assess the highest possible cost<sup>(a)</sup> for retiring outstanding PGW Revenue Bonds. An escrow deposit based on investments in State and Local Government Securities was assumed. Additionally, M.R. Beal estimated the swap termination payments, which are based on the swap's fair market value of the net present value of the remaining cash flows at the estimated time of PGW's sale. Based on current market conditions, an escrow deposit of approximately \$1.1 billion would be required to be made on August 31, 2014<sup>(b)</sup> to retire PGW's outstanding obligations and to terminate the Company's swap agreements.

### D. ADDITIONAL TAX ASSUMPTION DETAILS

#### BIRT<sup>(c)</sup>

Pursuant to the Philadelphia Code §19-2603 and state enabling legislation, the BIRT is imposed on persons engaging in business within Philadelphia. "Business" is defined in § 19-2601 and the state statute to exclude "specific business conducted by any public utility operating under the laws, rules and regulations administered by the PA PUC or conducted by a business subject to the jurisdiction of the Interstate Commerce Commission or conducted by a business subject to the jurisdiction of the Interstate Commerce Commission of furnishing or supplying service or services at the rates specified in its tariffs." Because of its municipal ownership, PGW is not currently subject to the BIRT, but the definition would allow the City to tax gross receipts and net income of a Privatized PGW attributable to lines of business that are not regulated by the PA PUC and for which a PA PUC tariff does not specify a rate.

Despite nominal deregulation under the Natural Gas Choice and Competition Act, 66 Pa. C.S. 2201 et seq., all rates paid by gas distribution customers for gas services provided by PGW are still set forth in or calculated based on PGW's tariff<sup>(d)</sup>. Assuming similar tariffs, this will also be the case for a Privatized PGW under current law. Lazard has calculated estimated BIRT receipts based solely on PGW's Parts and Labor Plan, which is the only substantial piece of PGW's current business that is

Source: M.R. Beal analysis.

(c) Per City analysis communicated to Lazard.

<sup>(</sup>a) Actual debt defeasance costs would likely be lower than those costs reflected herein (assuming no change in interest rates) due to the potential to purchase open market securities and the likely ability to tender for certain bonds for defeasance purposes.

<sup>(</sup>b) Assumed transaction close date for debt defeasance purposes.

<sup>(</sup>d) PGW Tariff available online at http://www.pgworks.com/files/pdfs/PGWGasServiceTariff.pdf.



not regulated in its PA PUC tariff, and thus the only substantial piece of PGW's current business that would likely be subject to BIRT under a privatized scenario.

For modeling purposes, Lazard applied a tax of 1.415 mills on PGW's gross receipts under the Parts and Labor line of business. For the net income portion, Lazard calculated an ongoing 6% net income on the Parts and Labor based on PGW management's estimates of 5% – 7% rate of return. In calculating the net present value of BIRT receipts, Lazard used the rate of 6.43% of net income for 2014 and already-existing decreasing rates through 2023. Actual net income may vary from estimated amounts, and tax rates are subject to change.

			NE	T PR	ESEN	T VA	LUE (	OF BI	RT _					
in millions)														
, in immons)			2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
BIRT—Gross Receipts			\$0.0	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	
Total BIRT—Gross Re	ceipts		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
					1									
	PV of			Terminal V			Net Present							
Discount	Taxes to the City	+	Assuming Pe	•		=		ts Taxes to tl						
Rate	'15 - '24		0.50%	1.00%	1.50%		0.50%	1.00%	1.50%					
2.25%	\$0.11		\$0.61 \$0.52	\$0.86	\$1.43		\$0.72	\$0.96 \$0.80	\$1.53					
2.50% 2.75%	\$0.11		\$0.52 \$0.45	\$0.70 \$0.58	\$1.04		\$0.63 \$0.56	\$0.80 \$0.69	\$1.15 \$0.92					
3.00%	\$0.10 \$0.10		\$0.45	\$0.58 \$0.50	\$0.82 \$0.66		\$0.56 \$0.50	\$0.69	\$0.92 \$0.77					
3.25%	\$0.10		\$0.40	\$0.30	\$0.55		\$0.30 \$0.45	\$0.53	\$0.77					
3.2376	\$0.10		30.55	\$0.43	\$0.55		\$0.43	\$0.55	\$0.00					
			2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
			\$0.00 <b>\$0.00</b>	\$0.03 \$0.03	\$0.03 <b>\$0.03</b>	\$0.03 <b>\$0.03</b>	\$0.03 <b>\$0.03</b>	\$0.03 <b>\$0.03</b>	\$0.03 <b>\$0.03</b>	\$0.03 <b>\$0.03</b>	\$0.03 \$0.03	\$0.03 \$0.03	\$0.03 \$0.03	\$0.
otal Taxes	PV of		\$0.00	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03					\$0.
Total Taxes  Discount	Taxes to the City	+	\$0.00 PV of Assuming Po	\$0.03 Terminal V	\$0.03		\$0.03  Net Presen Income	\$0.03 at Value of B e Taxes to th	\$0.03  IRT—Net ne City					\$0.
Otal Taxes  Discount Rate	Taxes to the City '15 - '24	+	\$0.00 PV of Assuming Po	\$0.03 Terminal V erpetual Grov 1.00%	\$0.03  alue wth Rate of 1.50%	\$0.03	\$0.03  Net Presen Income	\$0.03 at Value of B e Taxes to th 1.00%	\$0.03  IRT—Net the City  1.50%					\$0.
Discount Rate 8.75%	Taxes to the City '15 - '24 \$0.20	+	\$0.00 PV of Assuming Po 0.50% \$0.18	\$0.03  Terminal V erpetual Grov 1.00%  \$0.19	\$0.03  alue wth Rate of 1.50% \$0.20	\$0.03	\$0.03  Net Presen Incom 0.50% \$0.38	\$0.03 at Value of B e Taxes to the 1.00% \$0.39	\$0.03 IRT—Net the City 1.50% \$0.40					\$0.
Discount Rate 8.75% 9.00%	Taxes to the City '15 - '24 \$0.20 \$0.20	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17	\$0.03  Terminal V erpetual Grov 1.00% \$0.19 \$0.18	\$0.03 alue wth Rate of 1.50% \$0.20 \$0.19	\$0.03	\$0.03 Net Presen Incom 0.50% \$0.38 \$0.37	\$0.03 at Value of B e Taxes to the 1.00% \$0.39 \$0.38	\$0.03 IRT—Net the City 1.50% \$0.40 \$0.39					\$0.
Discount Rate 8.75% 9.00% 9.25%	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20	+	\$0.00 PV of Assuming Pe 0.50% \$0.18 \$0.17 \$0.16	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18	\$0.03	\$0.03  Net Presen Income 0.50% \$0.38 \$0.37 \$0.36	\$0.03 at Value of B e Taxes to the 1.00% \$0.39 \$0.38 \$0.37	\$0.03 IRT—Net the City 1.50% \$0.40 \$0.39 \$0.38					\$0.
Discount Rate 8.75% 9.00% 9.25% 9.50%	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20 \$0.20 \$0.19	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17 \$0.16 \$0.15	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17 \$0.16	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18 \$0.17	\$0.03	\$0.03  Net Presen Income 0.50% \$0.38 \$0.37 \$0.36 \$0.35	\$0.03 at Value of B e Taxes to th 1.00% \$0.39 \$0.38 \$0.37 \$0.35	\$0.03  IRT—Net the City 1.50% \$0.40 \$0.39 \$0.38 \$0.36					\$0.
Discount Rate 8.75% 9.00% 9.25%	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20	+	\$0.00 PV of Assuming Pe 0.50% \$0.18 \$0.17 \$0.16	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18	\$0.03	\$0.03  Net Presen Income 0.50% \$0.38 \$0.37 \$0.36	\$0.03 at Value of B e Taxes to the 1.00% \$0.39 \$0.38 \$0.37	\$0.03 IRT—Net the City 1.50% \$0.40 \$0.39 \$0.38					\$0.
Discount Rate 8.75% 9.00% 9.25% 9.50% 9.75%	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20 \$0.20 \$0.19	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17 \$0.16 \$0.15	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17 \$0.16	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18 \$0.17	\$0.03	\$0.03  Net Presen Incom 0.50%  \$0.38 \$0.37 \$0.36 \$0.35 \$0.34	\$0.03 at Value of B e Taxes to th 1.00% \$0.39 \$0.38 \$0.37 \$0.35	\$0.03 IRT—Net ne City 1.50% \$0.40 \$0.39 \$0.38 \$0.36 \$0.35					\$0.
Discount Rate 8.75% 9.00% 9.25% 9.50% 9.75%	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20 \$0.20 \$0.19	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17 \$0.16 \$0.15	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17 \$0.16	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18 \$0.17	\$0.03	\$0.03  Net Presen Incom 0.50% \$0.38 \$0.37 \$0.36 \$0.35 \$0.34  Net	\$0.03 at Value of B e Taxes to the 1.00% \$0.39 \$0.38 \$0.37 \$0.35 \$0.34	\$0.03 IRT—Net the City 1.50% \$0.40 \$0.39 \$0.38 \$0.36 \$0.35					\$0.
Discount Rate 8.75% 9.00% 9.25% 9.50% 9.75% Gross Receipts/ Net Income Discount Rates	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20 \$0.20 \$0.19	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17 \$0.16 \$0.15	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17 \$0.16	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18 \$0.17	\$0.03	\$0.03  Net Presen Incom 0.50% \$0.38 \$0.37 \$0.36 \$0.35 \$0.34  Net	\$0.03 at Value of B e Taxes to th 1.00% \$0.39 \$0.38 \$0.37 \$0.35 \$0.34 Present Valu BIRT to the 1.00%	\$0.03 IRT—Net the City 1.50% \$0.40 \$0.30 \$0.38 \$0.36 \$0.36 \$0.35  are of e City 1.50%					\$0.
Discount Rate 8.75% 9.00% 9.25% 9.50% 9.50% 9.75% Gross Receipts/ Net Income Discount Rates 2.25%/8.75%	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20 \$0.20 \$0.19	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17 \$0.16 \$0.15	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17 \$0.16	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18 \$0.17	\$0.03	\$0.03  Net Presen Incom 0.50% \$0.38 \$0.37 \$0.36 \$0.35 \$0.34  Net Total	\$0.03 at Value of B e Taxes to the 1.00% \$0.39 \$0.38 \$0.37 \$0.35 \$0.35 \$0.34 Present Value BIRT to the 1.00% \$1.4	\$0.03  IRT—Net the City 1.50% \$0.40 \$0.39 \$0.38 \$0.36 \$0.35  ue of e City					\$0.
Discount Rate 8.75% 9.00% 9.25% 9.50% 9.75% Gross Receipts/ Net Income Discount Rates	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20 \$0.20 \$0.19	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17 \$0.16 \$0.15	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17 \$0.16	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18 \$0.17	\$0.03	\$0.03  Net Presen Incom 0.50% \$0.38 \$0.36 \$0.36 \$0.35 \$0.34  Net Total 0.50%	\$0.03 at Value of B e Taxes to th 1.00% \$0.39 \$0.38 \$0.37 \$0.35 \$0.34 Present Valu BIRT to the 1.00%	\$0.03 IRT—Net the City 1.50% \$0.40 \$0.30 \$0.38 \$0.36 \$0.36 \$0.35  are of e City 1.50%					\$0.
Discount Rate 8.75% 9.00% 9.25% 9.50% 9.50% 9.75% Gross Receipts/ Net Income Discount Rates 2.25%/8.75%	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20 \$0.20 \$0.19	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17 \$0.16 \$0.15	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17 \$0.16	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18 \$0.17	\$0.03	\$0.03  Net Presen Incom 0.50% \$0.38 \$0.37 \$0.36 \$0.35 \$0.34  Net Total 0.50% \$1.1 \$1.0 \$0.9	\$0.03 at Value of B e Taxes to the 1.00% \$0.39 \$0.38 \$0.37 \$0.35 \$0.35 \$0.34 Present Value BIRT to the 1.00% \$1.4	\$0.03 IRT—Net the City 1.50% \$0.40 \$0.30 \$0.35 \$0.35 the of \$0.35 the of \$1.50% \$1.50%					\$0.
Rate  8.75% 9.00% 9.25% 9.50% 9.75%  Gross Receipts/ Net Income Discount Rates  2.25%/8.75% 2.50%/9.00%	Taxes to the City '15 - '24 \$0.20 \$0.20 \$0.20 \$0.20 \$0.19	+	\$0.00 PV of Assuming Pc 0.50% \$0.18 \$0.17 \$0.16 \$0.15	\$0.03 Terminal V repetual Grov 1.00% \$0.19 \$0.18 \$0.17 \$0.16	\$0.03  alue wth Rate of 1.50% \$0.20 \$0.19 \$0.18 \$0.17	\$0.03	\$0.03  Net Presen Incom 0.50% \$0.38 \$0.37 \$0.36 \$0.35 \$0.34  Net Total 0.50% \$1.1 \$1.0	\$0.03 at Value of B e Taxes to th 1.00% \$0.39 \$0.37 \$0.35 \$0.37 \$0.35 \$0.34 Present Value BIRT to the 1.00% \$1.4 \$1.2	\$0.03 IRT—Net the City 1.50% \$0.30 \$0.30 \$0.35 \$0.35 \$0.55 ac of c City 1.50%					\$0.

# City and School District Real Estate Tax/Public Utility Realty Tax Act<sup>(a)</sup>

Pursuant to the Philadelphia Code §19-1300 and §19-1800, all real estate within the City is subject to Real Estate Tax ("RET"). As such, all PGW-owned real estate is subject to RET. However, the PURTA provides for a tax swap, where the public utility remits PURTA taxes to the City and School District instead of remitting Philadelphia RET. PURTA's definition of public utility includes only "entities furnishing public utility service under the jurisdiction of the PUC"; therefore, PGW realty associated with distribution services would be subject to PURTA (and not RET) while PGW realty



associated with the commodity and transportation services would be subject to RET (and not PURTA). Proceeds from the Real Estate Tax are split between the City (approximately 45%) and the School District (approximately 55%).

Lazard calculated the combined tax expense for RET and PURTA using a rate of 1.3% against an assessed PGW-owned real estate portfolio value, provided by the City, of \$39 million. This tax is deducted from net income for federal, state and local tax purposes.

# NET PRESENT VALUE OF REAL ESTATE TAX/PURTA(a)

#### (\$ in millions)

Real Estate Taxes/PURTA Total Real Estate Taxes

2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
\$0.0	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	
\$0.0	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5

Discount
Rate
2.25%
2.50%
2.75%
3.00%
3.25%

PV of
Taxes to the City
'15 - '24
\$4.6
\$4.5
\$4.4
\$4.4
\$4.3

PV of Terminal Value			
Assuming I	Perpetual Gro	owth Rate of	
0.50%	1.00%	1.50%	
\$23.9	\$33.5	\$55.8	
\$20.4	\$27.2	\$40.9	
\$17.7	\$22.8	\$31.9	
\$15.6	\$19.5	\$26.0	
\$13.8	\$16.9	\$21.7	

Net Present Value of Real Estate/ PURTA Taxes to the City				
	0.50%	1.00%	1.50%	
	\$28.5	\$38.1	\$60.4	
	24.9	31.7	45.4	
l	22.2	27.2	36.3	
	19.9	23.8	30.3	
	18.1	21.2	26.0	

# Use and Occupancy Tax(b)

Pursuant to the Philadelphia Code §19-1806, the School District of Philadelphia imposes a tax on the use or occupancy of real estate within the district for the purpose of conducting any business, trade, occupation, profession, vocation, or any other commercial or industrial activity. All proceeds from the UOT go directly to the School District.

Effective July 1, 2013, UOT rates are \$1.13 per annum per \$100 of assessed value, exempting the first \$177,000 per property. For modeling purposes, this rate is applied to net income before any deductions for federal, state and other local taxes.

# NET PRESENT VALUE OF UOT

#### (\$ in millions)

Total Business Use & Occupancy Tax

2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	TY
\$0.0	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	
\$0.0	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4

Discount
Rate
2.25%
2.50%
2.75%
3.00%
3.25%

PV of
Taxes to the City
'15 - '24
\$2.3
\$2.3
\$2.2
\$2.2
\$2.2

PV o	PV of Terminal Value			
Assuming F	Assuming Perpetual Growth Rate of			
0.50%	1.00%	1.50%		
\$20.2	\$28.3	\$47.1		
\$17.2	\$23.0	\$34.5		
\$14.9	\$19.2	\$26.9		
\$13.1	\$16.4	\$21.9		
\$11.7	\$14.2	\$18.3		

Net Present Value of			
U&O Taxes to the City 0.50% 1.00% 1.50%			
\$22.5	\$30.6	\$49.4	
19.5	25.3	36.7	
17.2	21.5	29.2	
15.3	18.6	24.1	
13.8	16.4	20.5	

Reflects 100% of value of RET/PURTA. City would receive approximately 45% of present value, or \$9.9 – \$16.3 million. Per City analysis communicated to Lazard



#### State Income Tax

Pennsylvania's corporate net income tax rate is 10.0%. For modeling purposes, this rate is applied to projected net income, which already includes deductions for local (but not federal) taxes.

# Federal Income Tax

The highest marginal U.S. federal income tax rate for corporations is 35.0%. For modeling purposes, this rate is applied to net income, which already includes deductions for state and local taxes

# E. CITY-OWNED GAS UTILITIES IN THE U.S.

Of the 30 largest U.S. cities, only 4 currently have a gas distribution company owned by the municipality. Of the top 10 cities by population, Philadelphia and San Antonio are the only cities that own and operate their respective local gas distribution companies. Most of Philadelphia's peer cities (e.g., Atlanta, Baltimore, Boston, Chicago, Detroit, Los Angeles, New York, Pittsburgh, Washington D.C.) do not own and operate gas distribution companies.

TOP 30 U.S. CITIES BY POPULATION							
	CITY	STATE	GAS DISTRIBUTION COMPANY	# OF CUSTOMERS			
1	New York	New York	Consolidated Edison	1,100,000			
2	Los Angeles	California	Sempra (SoCalGas)	5,800,000			
3	Chicago	Illinois	Integrys (Peoples Gas)	829,000			
4	Houston	Texas	Centerpoint	3,300,000			
5	Philadelphia	Pennsylvania	Philadelphia Gas Works	503,000			
6	Phoenix	Arizona	Southwest Gas	1,822,000			
7	San Antonio	Texas	CPS Energy	326,834			
8	San Diego	California	Sempra (SDG&E)	1,400,000			
9	Dallas	Texas	Atmos Energy	1,300,000			
10	San Jose	California	PG&E	4,373,000			
11	Austin	Texas	ONEOK (Texas Gas Service Company)	635,000			
12	Jacksonville	Florida	TECO (Peoples Gas System)	347,000			
13	Indianapolis	Indiana	Citizens Energy Group	263,150			
14	San Francisco	California	PG&E	4,373,000			
15	Columbus	Ohio	NiSource	3,320,238			
16	Fort Worth	Texas	Atmos Energy	1,300,000			
17	Charlotte	North Carolina	Piedmont Natural Gas	985,034			
18	Detroit	Michigan	DTE (MichCon)	1,200,000			
19	El Paso	Texas	ONEOK	635,000			
20	Memphis	Tennessee	Memphis Light, Gas & Water	320,000			
21	Boston	Massachusetts	Northeast Utilities	337,164			
22	Seattle	Washington	Puget Energy	767,601			
23	Denver	Colorado	Xcel	1,900,000			
24	Washington	District of Columbia	WGL	1,094,109			
25	Nashville	Tennessee	Piedmont (Nashville Gas)	985,034			
26	Baltimore	Maryland	Constellation (BG&E)	655,205			
27	Louisville	Kentucky	PPL (LG&E)	320,000			
28	Portland	Oregon	Northwest Natural	688,067			
29	Oklahoma City	Oklahoma	ONEOK	852,000			
30	Las Vegas	Nevada	Southwest Gas	1,822,000			

Indicates cities with municipally-owned gas utilities.

Source: Company filings.

Note: Customer count represents total gas customers served.