

Part 3: Income statement, revenues, and expenses (OPEX)

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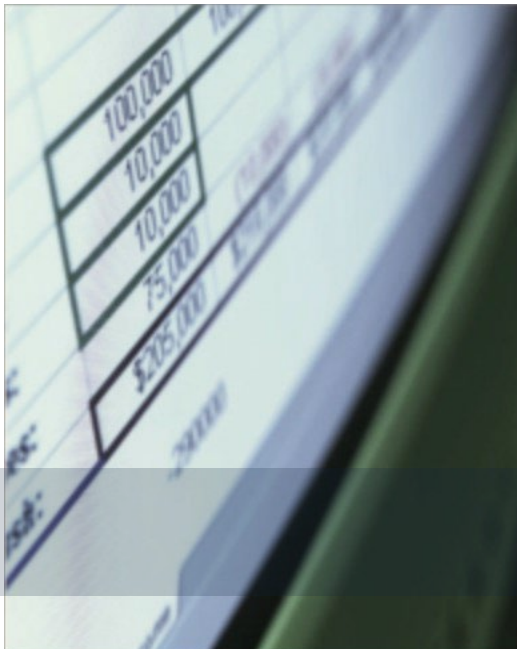
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MICHIGAN STATE UNIVERSITY

3.0 Utility, enterprise, or investment basis: private and some public

$$RR = r_a (RB) + O\&M + D + T$$

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where:

RR = total test year (annualized) revenue requirements

r_a = authorized (not guaranteed) rate of return to compensate debt holders and equity shareholders

RB = rate base (original cost of invested utility plant in service net of accumulated depreciation and adjustments)

O&M = operation & maintenance expenses, including administrative & general

D = depreciation and amortization expense

T = taxes other than income and income tax expense

Cost-based rates and revenue sufficiency are a function of both the numerator and denominator:

$$\frac{\text{Revenue requirements (RR)}}{\text{Estimated sales (billing determinants)}}$$

3.0 Topics

1. Income statement overview
2. Operating revenues
3. Revenues by customer class
4. Operating expenses
5. Operation and maintenance by function
6. Personnel-related expenses
7. Disallowed expenses
8. Depreciation expense
9. Income and other taxes
10. Cost-adjustment mechanisms (trackers)
11. System improvement charges
12. Financial auditing for ratemaking
13. Management auditing
14. Rate-case adjustments

3.1 Income statement

400. COMPARATIVE INCOME STATEMENT REVENUES AND EXPENSES

Line No.	Account Number and Title (a)	Schedule No. (c)	Balance End of Year (d)	Balance Previous Year (e)	Increase/ Decrease (f)
1	400.0 Operating Revenues	401	64,480,271	55,695,610	8,784,661
2					
3	UTILITY OPERATING EXPENSES		XXX	XXX	XXX
4	401.0 Operating Expenses		24,605,823	21,602,578	3,003,245
5	403.0 Depreciation Expense		10,879,157	9,503,810	1,375,347
6	406.0 Amortization of Utility Plant Acquisition Adjustment	417	(53,196)	(54,482)	1,286
7	407.1 Amortization of Limited Term Plant	417			
8	407.2 Amortization of Property Losses	417			
9	407.3 Amortization of Other Utility Plant	417			
10	407.4 Amortization of Regulatory Assets				
11	408.0 Taxes Other Than Income	418	1,382,840	1,304,130	78,710
12	409.10 Federal Income Taxes, Utility Operating Income	419	581,852	11,077	570,775
13	409.11 State Income Taxes, Utility Operating Income	419	278,615		278,615
14	409.12 Local Income Taxes, Utility Operating Income				
15	410.0 Deferred Income Tax	420			
16	410.10 Federal	420	321,191	491,653	(170,462)
17	410.11 State	420	(56,814)	(248,234)	191,420
18	Total Deferred Income Tax	420	264,377	243,419	20,958
19	411.1 Provision for Deferred Income Taxes - Credit, Utility Operating Income	421			
20	Tax Credits				
21	412.1 Investment Tax Credit, Deferred to Future Periods, Utility Operating Income				
22	412.2 Investment Tax Credits, Restored to Operating Income, Utility Operating Income		(35,354)	(35,159)	(195)
23	Total Tax Credits		(35,354)	(35,159)	(195)
24	TOTAL UTILITY OPERATING EXPENSES		37,904,114	32,575,373	5,328,741
25					

3.1 Income statement

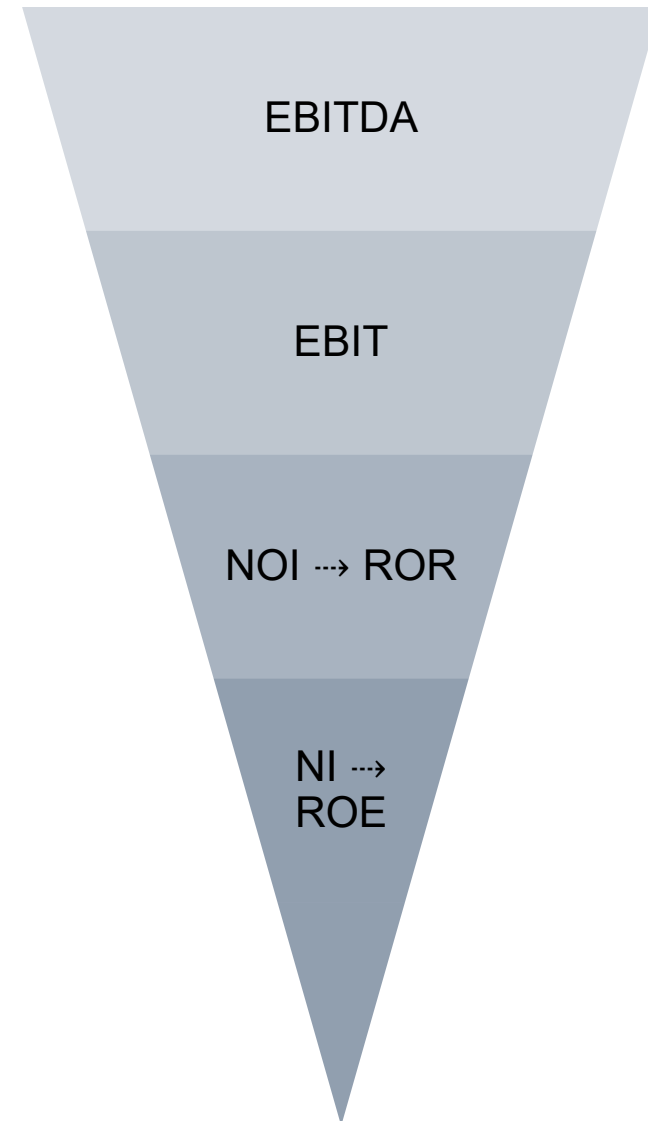
26	NET UTILITY OPERATING INCOME (LOSS)		26,576,157	23,120,237	3,455,920
27					
28	OTHER OPERATING INCOME (LOSS)		XXX	XXX	XXX
29	413.0 Income from Utility Plant Leased to Others				
30	414.0 Gains (Losses) from Disposition of Utility Property				
31	TOTAL OTHER OPERATING INCOME (LOSS)				
32					
33	NON-OPERATING INCOME		XXX	XXX	XXX
34	415.0 Revenues from Merchandising, Jobbing and Contract Work				
35	419.0 Interest & Dividend Income		210,509	212,206	(1,697)
36	420.0 Allowance for Funds Used During Construction (AFUDC)		3,821,329	1,448,195	2,373,134
37	421.0 Non-Utility Income		23,599	21,708	1,891
38	TOTAL NON-OPERATING INCOME		4,055,437	1,682,109	2,373,328
39					
40	NON-OPERATING DEDUCTIONS		XXX	XXX	XXX
41	408.2 Taxes Other Than Income, Other Income and Deductions				
42	409.2 Income Taxes, Oter Income and Deductions				
43	416.0 Costs & Expenses of Merchandising, Jobbing and Contract Work				
44	426.0 Miscellaneous Non-Utility Expenses		(739,421)	(217,610)	(521,811)
45	TOTAL NON-OPERATING INCOME & DEDUCTIONS		3,316,016	1,464,499	1,851,517
46					
47	INTEREST EXPENSE		XXX	XXX	XXX
48	427.0 Interest Expense		6,866,883	4,937,264	1,929,619
49	428.0 Amortization of Debt Discount & Expenses		168,966	164,790	4,176
50	429.0 Amortization of Premium on Debt		11,339	11,337	2
51	TOTAL INTEREST EXPENSE		7,047,188	5,113,391	1,933,797
52					
53	EXTRAORDINARY ITEMS		XXX	XXX	XXX
54	433.0 Income				
55	434.0 Deductions				
56	409.3 Income Taxes				
57	409.4 Other				
58	TOTAL EXTRAORDINARY ITEMS				
59	NET INCOME (LOSS)		22,844,985	19,471,345	3,373,640

3.1 Income statement comparison

Line no.	Acct.	Sched.	Item	YORK W	Public	Coop	YORK WW
1	400.00	401	Utility Operating Revenue	64,480	53,451	50,079	6,551
2							
3	401.00	407	Operation & Maintenance Expense	24,606	24,606	24,606	4,731
4	403.00		Depreciation Expense	10,879	10,879	10,879	936
5	406.00	417	Amortization of Utility Plant Acquisition Adjustment	(53)	(53)	(53)	(16)
6			>Depreciation and Amortization	10,826	10,826	10,826	920
7	408.00	418	Taxes Other Than Income	1,383			76
10			Payment in Lieu of Taxes		1,106	553	
8	409.10	419	Federal Income Taxes, Utility Operating Income	582			0
9	409.11	419	State Income Taxes, Utility Operating Income	279			0
11			>Tax Expense	2,244	1,106	553	76
12	410.10	420	Federal Deferred Income Tax	321			(121)
13	410.11	420	State Deferred Income Tax	(57)			(83)
14			>Total Deferred Income Tax	264			(204)
15							
16	412.20		>Total tax credits (ITC)	(35)			0
17			>Total Utility Operating Expenses (inclusive of D&T)	37,905	36,538	35,985	5,522
18							
19			NET UTILITY OPERATING INCOME (NOI)	26,575	16,913	14,094	1,029
20	419.00		Interest & Dividend Income	211			0
21	420.00		Allowance for Funds Used During Construction (AFUDC)*	3,821			332
22	421.00		Non-Utility Income	24			0
23			>Total Non-Operating Income	4,056			332
24	426.00		Miscellaneous Non-Utility Expenses	(739)			(16)
25			>Net Non-Operating Income	3,317			316
26	427.00		Interest Expense	6,867	10,987	6,867	0
27			Principal payments		2,197	1,373	
28	428.00		Amortization of Debt Discount and Expenses	169			0
29	429.00		Amortization of Premium Debt	11			0
30			>Total Interest or Debt Service Expense	7,047	13,185	8,240	0
31			Net Utility Operating Income (NOI)	26,575	16,913	14,094	1,029
32			Total Interest or Debt Service Expense	(7,047)	(13,185)	(8,240)	0
33			>Net Income (excludes non-operating)	19,528			1,029
34			>NOI less Debt Service (fund reserves)		3,728	5,853	

3.1 Measuring income

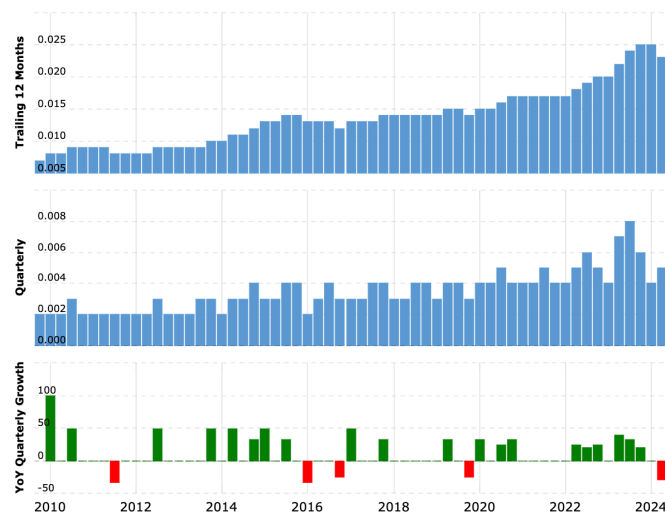
- EBITDA: Earnings before interest, taxes, depreciation, and amortization
 - ▶ EBITDA = Operating revenues from services - operating expenses (O&M and A&G) and taxes other than income taxes (treated as OPEX)
 - ▶ Income from the primary operations of the company before certain expenditures
 - ▶ May be established by the debt service coverage ratio (DSCR) for non-private utilities not using RBROR
- EBIT: Earnings before interest and income taxes
 - ▶ EBIT = EBITDA - depreciation and amortization expense
 - ▶ Income from the primary operations of the company, net of certain expenditures



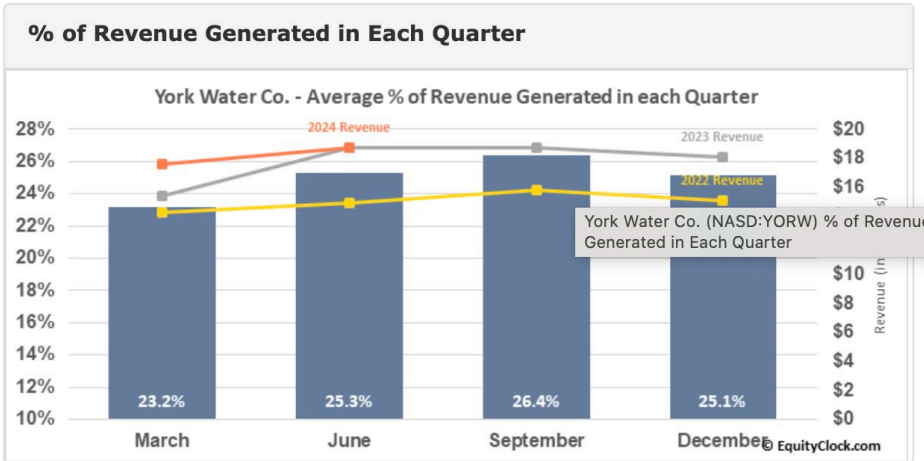
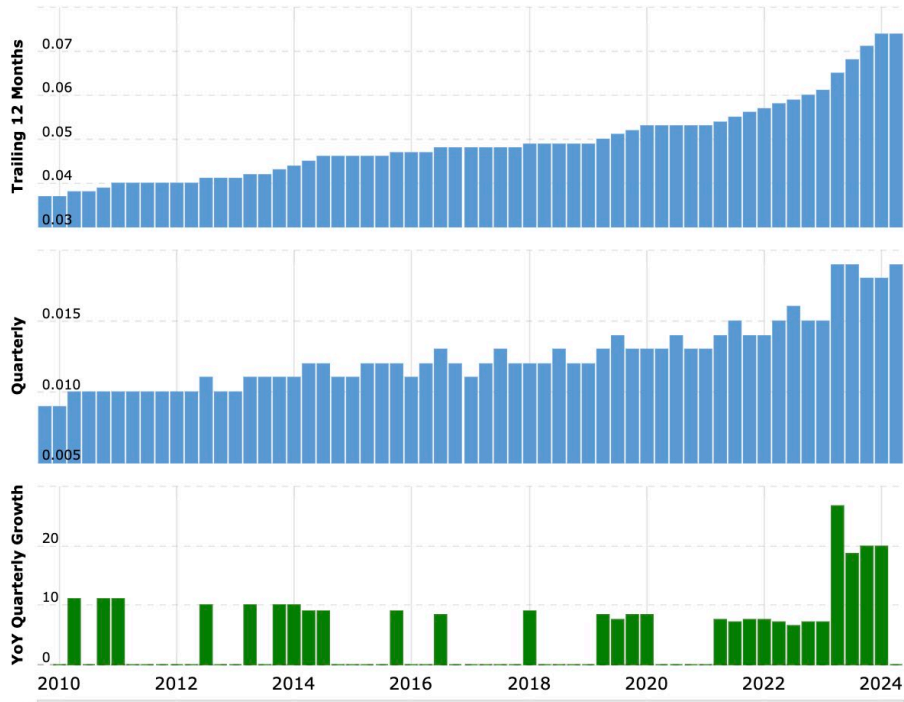
3.1 Net operating income and net income

- NOI: Net operating income before interest
 - ▶ $\text{NOI} = \text{EBIT} - \text{income taxes}$
 - ▶ Net income (after effect of income taxes) available to debt holders & equity shareholders
 - ▶ $\text{Net operating income} / \text{rate base} = \text{overall rate of return (ROR)}$
 - ▶ Defines the line ("above & below") - investors are funded from below the line (see Part 4)

- NI: Net income after interest and income taxes
 - ▶ $\text{NI} = \text{NOI} - \text{other deductions and interest (cost of debt)} + \text{other income (after taxes)}$
 - ▶ Profit or loss from all operations available to equity shareholders as distributions or retained earnings for the year
 - ▶ $\text{Net income} / \text{shareholder equity} = \text{shareholder return on equity (ROE)}$ (see Part 4)



3.1 York: operating revenues over time and seasonality



3.2 Operating revenues

- Water Sales Accounts (USoA, 1996)
 - 460. Unmetered Water Revenue
 - 461. Metered Water Revenue
 - 461.1 Metered Sales to Residential Customers
 - 461.2 Metered Sales to Commercial Customers
 - 461.3 Metered Sales to Industrial Customers
 - 461.4 Metered Sales to Public Authorities
 - 461.5 Metered Sales to Multiple Family Dwellings
 - 462. Fire Protection Revenue
 - 462.1 Public Fire Protection
 - 462.2 Private Fire Protection
 - 464. Other Sales to Public Authorities
 - 465. Sales to Irrigation Customers
 - 466. Sales for Resale
 - 467. Interdepartmental Sales
- Other Water Revenues Accounts (USoA, 1996)
 - 469. Guaranteed Revenues
 - 470. Forfeited Discounts
 - 471. Miscellaneous Service Revenues
 - 472. Rents from Water Property

3.2 Operating revenues

401. OPERATING REVENUES SUPPORTING SCHEDULE - Account No. 400.0

This schedule should include a breakdown of the accounts that constitute the ending balance in Account No. 400.0 - Operating Revenues.

Line No.	Account Number and Title (a)	Schedule No. (b)	Balance End of Year (c)	Balance Previous Year (d)	Increase/Decrease (e)
1	WATER SALES REVENUE				
2	460.0 Unmetered Water Revenue				
3	460.1 Residential		14,733	4,741	9,992
4	460.2 Commercial		816	122	694
5	460.3 Industrial				
6	460.4 Public				
7	460.5 Other				
8					
9	Total Unmetered Water Revenue		15,549	4,863	10,686
10					
11	461.0 Metered Water Revenue				
12	461.1 Residential		39,858,819	35,257,426	4,601,393
13	461.2 Commercial		11,432,108	9,188,780	2,243,328
14	461.3 Industrial		5,095,683	4,398,676	697,007
15	461.4 Public		870,777	712,877	157,900
16	461.5 Multiple Family Dwellings				
17	461.6 Other				
18					
19	Total Metered Water Revenue		57,257,387	49,557,759	7,699,628
20					
21	462.1 Public Fire Protection		1,653,623	1,392,982	260,641
22	462.2 Private Fire Protection		2,470,817	2,055,712	415,105
23	464.0 Other Sales to Public (Special Contracts)	404			
24					
25					
26	TOTAL WATER SALES ¹		61,397,376	53,011,316	8,386,060
27					
28	OTHER WATER REVENUES				
29					
30	466.0 Sales for Resale	405	1,879,245	1,403,095	476,150
31	467.0 Interdepartmental Sales				
32	470.0 Forfeited Discounts				
33	471.0 Miscellaneous Service Revenues		158,037	120,273	37,764
34	472 Rents from Water Property		489,756	495,117	(5,361)
35	473 Interdepartmental Rents				
36	474 Other Water Revenues	406	555,857	665,809	(109,952)
37					
38	TOTAL OTHER WATER REVENUES		3,082,895	2,684,294	398,601
39					
40	TOTAL WATER SALES & OTHER REVENUES		64,480,271	55,695,610	8,784,661

3.2 Non-operating revenues

- Non-operating (non-utility) income and deductions
 - ▶ Reported on the income statement
 - ▶ Excluded from net income for ratemaking and returns

- Non-operating activities (NRCAM, 2003)
 - ▶ Part of the general rate case investigation is to review the utility’s cost allocation procedures and associated financial results
 - ▶ Ensures that unregulated costs are allocated to unregulated (non-operating) accounts.
 - ▶ Auditors will also want to look for “incidental” uses of regulated plant

- Other utility services
 - ▶ Utilities may be converged (electricity and gas, power and water)
 - ▶ Water utilities may provide wastewater and stormwater services
 - ▶ Separate systems of accounts apply
 - ▶ Separate reports are filed for separate operations

**CLASS A, B and C WASTEWATER COMPANY
PUC ANNUAL REPORT
OF**

Utility Code
A-230087

Company: THE YORK WATER COMPANY

Address: 130 EAST MARKET ST., YORK, PA 17401

**TO THE
PENNSYLVANIA
PUBLIC UTILITY COMMISSION**

For the Year Ended December 31, 2018

Telephone Number 717-845-3601

Fax Number 717-718-3090

E-Mail matthewp@yorkwater.com

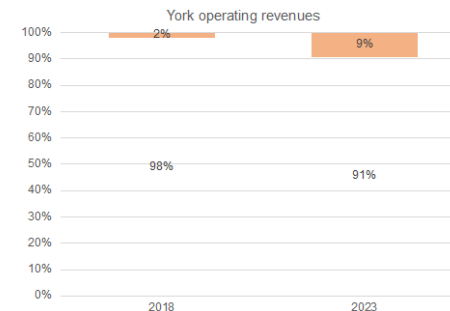
Officer to whom correspondence
concerning this report should be addressed:

Matthew Poff
First Name Last Name

Chief Financial Officer
Title

130 East Market St., York, PA 17401

Address City State Zip



Q. Why are non-operating activities segregated on the income statement?

3.2 Poll: Customer classes

- Which of the following is *not* a customer class?
 - A. Public authorities
 - B. Irrigation users
 - C. Power plants
 - D. Private fire protection

3.2 Poll: Customer classes

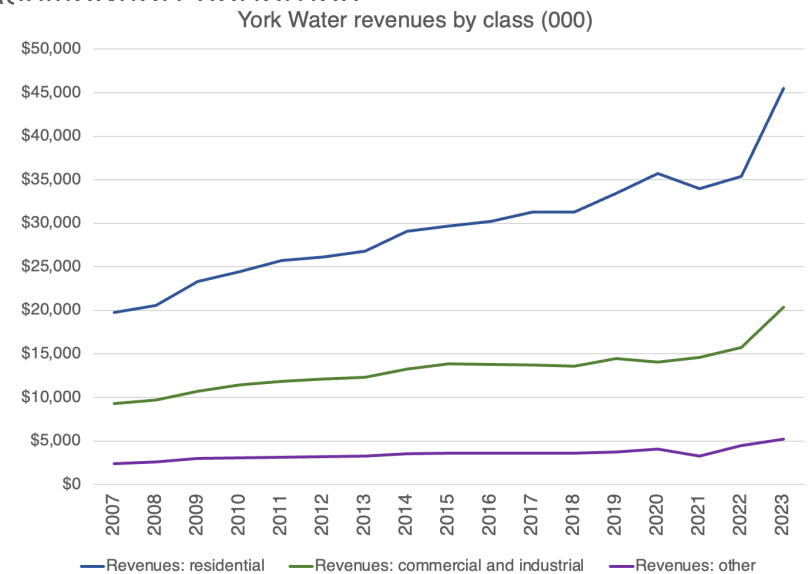
- Which of the following is *not* a customer class?
 - A. Public authorities
 - B. Irrigation users
 - C. Power plants
 - D. Private fire protection

3.3 Revenues by customer class

- Utility revenues
 - ▶ Privately owned utilities depend mainly on revenues related to sales (rates and charges)
 - ▶ Non-private utilities may have additional revenues from special fees, taxes, and grants
- Sales revenues are reported according to customer classes (see also, Part 5)
 - ▶ Groups of customers with similar patterns of usage and cost characteristics
 - ▶ Some small utilities may serve only a few classes
 - ▶ Advanced metering methods may lead to new classification schemes

- Major customer classes

- ▶ Residential
 - Single-family
 - Multi-family
- ▶ Nonresidential
 - Commercial
 - Industrial
 - Wholesale
 - Agricultural and irrigation
 - Mining
 - Public and private fire protection (water)
 - Public authorities and special use (e.g., street lighting in electricity)



3.3 York: customers and gallons sold

402. OPERATING REVENUES SUPPORTING SCHEDULE - CUSTOMER DATA

Customers should be reported on the basis of number of meters, (except where multiple customers have one meter) plus number of flat rate accounts. Where separate meter readings are added for billing purposes, one customer shall be counted for each group of meters so added.

Line No.	Customer Classes (a)	Customers End of Current Year (b)	Customers End of Previous Year (c)
1	Unmetered Sales	XXX	XXX
2	Residential		126
3	Commercial	1	3
4	Industrial		
5	Public		
6	Other		
7	Public Fire		
8	Private Fire		
9	Total Unmetered Sales	1	129
10			
11	Metered Sales	XXX	XXX
12	Residential	65,236	64,317
13	Commercial	4,493	4,455
14	Industrial	300	297
15	Public	252	251
16	Multiple Family Dwellings		
17	Other		
18	Private Fire	1,195	1,184
19	Public Fire	246	235
20	Sales for Resale	4	4
21	Total Metered Sales	71,726	70,743

403. OPERATING REVENUES SUPPORTING SCHEDULE - GALLONS SOLD

1. Report below the gallons sold for the current year and the previous year for each customer class.
2. How the quantities of water sold to unmetered flat-rate customers were determined should be explained in a footnote.

Line No.	Account (a)	Gallons Sold Current Year (000 omitted) (b)	Gallons Sold Previous Year (000 omitted) (c)
1			
2	Unmetered Sales	XXX	XXX
3	Residential		
4	Commercial		
5	Industrial		
6	Public		
7	Other		
8	Public Fire		
9	Private Fire		
10	Total Unmetered Sales		
11			
12	Metered Sales	XXX	XXX
13	Residential	3,050,463	2,981,791
14	Commercial	1,754,780	1,661,892
15	Industrial	903,236	924,633
16	Public	133,169	124,501
17	Multiple Family Dwellings		
18	Other		
19	Public Fire		
20	Private Fire	14,610	10,443
21	Sales for Resale	260,507	244,396
22	Total Metered Sales	6,116,765	5,947,656
23			
24	Interdepartmental Sales		
25			
26	Total Water Sales	6,116,765	5,947,656

FOOTNOTES: The quantities of water sold to unmetered flat-rate customers were not determined.

3.3 York: sales for resale (wholesale sales)

405. SALES FOR RESALE SUPPORTING SCHEDULE - Account No. 466.0

1. Designate by asterisk in Column (a) purchases which are affiliated with respondent.
2. The entries on Lines 1 to 8 under Columns (h) to (s) must correspond to the entries on the same lines under Columns (a) to (g). The totals of Columns (h) to (s), inclusive, must agree with respective quantities reported in Column (e).

Line No.	Name of Purchaser (a)	Point of Delivery (b)	Service* Capacity (c)	Pressure @ Point of Delivery (d)	Quantity of Water Sold (1,000-Gal.) (e)	Revenues \$ (f)	Revenue \$ Per (1,000-Gal.) (g)
1	Bulk Water Sales	1801 Mt. Rose Avenue York, PA 17403	3" Turbo	65 psi	15,513	161,133	10.39
2	New Freedom Borough	50 Washington Road	6" Tru-Flow	80 psi	11,412	112,500	9.86
3	Glen Rock Water Authority	Church Street	6" Turbo	60 psi	50,200	291,288	5.80
4	Dover Township	Bull Road	4" Tru-Flow	117 psi	132,312	965,581	7.30
5	Stewartstown Borough	Rt. 851 at Deller Road	3" Turbo	130 psi	51,070	348,743	6.83
6							
7							
8							
Totals				TOTALS	260,507	1,879,245	7.21

* Size of meter from which delivery is made.

MONTHLY SALES IN 1,000-GAL BY PURCHASER

Line No.	January (h)	February (i)	March (j)	April (k)	May (l)	June (m)	July (n)	August (o)	September (p)	October (q)	November (r)	December (s)
1	156	254	317	2336	3749	3996	2728	1607	348			22
2	964	906	903	932	900	900	1032	990	1025	900	900	1060
3	4720	4000	4050	4000	4000	4000	4000	4440	4000	4770	4040	4180
4	8996	6865	7985	9364	9401	10817	12053	20871	9424	11474	14748	10314
5	4120	3880	3820	3960	3740	5350	4380	4820	4140	4830	3730	4300
6												
7												
8												
Totals	18956	15905	17075	20592	21790	25063	24193	32728	18937	21974	23418	19876

3.3 York: other revenues

406. OTHER WATER REVENUES SUPPORTING SCHEDULE - Account No. 474.0

Provide a breakdown of Other Water Revenues - Account No. 474.0 not shown in any other revenue account.

Line No.	Description (a)	Amounts (b)
1	Billing Services Revenue	474,270
2	Collection Services Revenue	38,009
3	Flushing Revenue Offset	(184)
4	Scrap Metal Sales	42,732
5	Equipment Sales	750
6	Miscellaneous	280
7		
16		
17	TOTALS	555,857

3.4 Operation and maintenance expenses

- Total cost of utility operations that offset utility sales revenues – subject to audit
 - ▶ Operation and maintenance (O&M) expenses – allocated functionally
 - ▶ Administrative and general (A&G) expenses – included in O&M
 - ▶ Depreciation expense - a capital expense included in total operating expense
 - ▶ Federal and state income and other taxes (e.g., property taxes)
- O&M expenses are incurred or reasonably expected to incur during the rate year
 - ▶ Expenses result in a charge against current income – "expired costs"
 - ▶ Cash outlay (cash basis) or incurred expense (accrual basis)
 - ▶ Substantial O&M expenses may be "capitalized" with regulatory approval (e.g., tank painting)
- Deferred expenses
 - ▶ Expenses a company has already incurred but that have been deferred for ratemaking to allow recovery in later periods
 - ▶ Deferring costs to a later period usually requires regulatory approval
 - ▶ ASC 980 (FASB 71) allows deferral for GAAP purposes if there is a reasonable expectation that the amount deferred will be recovered in future rates

3.4 O&M accounts for functionalization (USoA, 1996)

- 601. Salaries and Wages – Employees
- 603. Salaries and Wages – Officers, Directors, and Majority Stockholders
- 604. Employee Pensions and Benefits
- 610. Purchased Water
- 615. Purchased Power
- 616. Fuel for Power Production
- 618. Chemicals
- 620. Materials and Supplies
- 631. Contractual Services – Engineering
- 632. Contractual Services – Accounting
- 633. Contractual Services – Legal
- 634. Contractual Services – Management Fees
- 635. Contractual Services – Testing
- 636. Contractual Services – Other
- 641. Rental of Building/Real Property
- 642. Rental of Equipment
- 650. Transportation Expenses
- 656. Insurance – Vehicle
- 657. Insurance – General Liability
- 658. Insurance – Workman’s Compensation
- 659. Insurance – Other
- 660. Advertising Expenses
- 666. Regulatory Commission Expenses – Amortization of Rate Case Expense
- 667. Regulatory Commission Expenses – Other
- 668. Water Resource Conservation Expense
- 670. Bad Debt Expense
- 675. Miscellaneous Expenses

3.4 O&M expense accounts

407. WATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

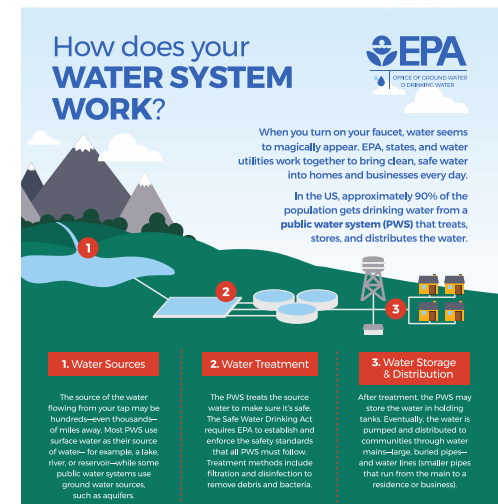
Line No.	Account Number and Title (a)	Schedule No. (b)	Amount of Operating Expenses		
			Current Year (c)	Previous Year (d)	Increase (Decrease) (e)
1	Salaries and Wages		XXX	XXX	XXX
2	601.0 Employees	409	7,626,411	7,122,991	503,420
3	603.0 Officers, Directors and Majority Stockholders	409	432,232	394,662	37,570
4	Total Salaries and Wages		8,058,643	7,517,653	540,990
5	604.0 Employee Pensions and Benefits	409-A	2,195,312	1,742,374	452,938
6	610.0 Purchased Water	408			
7	615.0 Purchased Power		1,206,254	1,143,244	63,010
8	616.0 Fuel for Power Production		224,263	21,826	202,437
9	618.0 Chemicals		1,751,702	1,006,100	745,602
10	620.0 Materials and Supplies		1,203,476	1,069,704	133,772
11	Contractual Services		XXX	XXX	XXX
12	631.0 Engineering	411-A	71		71
13	632.0 Accounting	411-A	270,837	218,921	51,916
14	633.0 Legal	411-A	160,980	243,988	(83,008)
15	634.0 Management Fees	411-B			
16	635.0 Testing	411-B	44,076	23,050	21,026
17	636.0 Other - Maintenance	411-B	3,861,648	3,043,160	818,488
18	Total Contractual Services		4,337,612	3,529,119	808,493
19	641.0 Rental of Building/Real Property				
20	642.0 Rental of Equipment		5,078	38,800	(33,722)
21	650.0 Transportation Expenses		843,787	734,941	108,846
22	Insurance		XXX	XXX	XXX
23	656.0 Vehicle		65,036	42,804	22,232
24	657.0 General Liability		600,929	649,563	(48,634)
25	658.0 Workman's Compensation		148,203	130,203	18,000
26	659.0 Other		397,103	348,957	48,146
27	Total Insurance		1,211,271	1,171,527	39,744
28	660.0 Advertising Expense - Other than Conservation	412			
29	666.0 Regulatory Commission Expenses-Amort. of Rate Case Expense		82,687	17,326	65,361
30	667.0 Regulatory Commission Expenses-Other				
31	668.0 Water Resource Conservation Expense		6,400	6,300	100
32	670.0 Bad Debt Expense		538,152	431,852	106,300

3.4 O&M expense accounts

33		Miscellaneous Expenses		XXX	XXX	XXX
34	675.0	Miscellaneous Other	413	375,481	870,432	(494,951)
35	675.1	Membership Dues		106,318	94,990	11,328
36	675.2	Registration Fees for Conventions & Meetings of Industry	414	1,549	2,000	(451)
37	675.3	Communication Services		227,226	166,100	61,126
38	675.4	Trustee Fees and Bank Charges		832,451	769,081	63,370
39	675.5	Stockholders Expenses		313,492	256,755	56,737
40	675.6	Office Expenses and Utilities		153,562	141,057	12,505
41	675.7	Uniforms		20,010	13,321	6,689
42	675.8	Director's Fees and Expenses		399,000	419,567	(20,567)
43	675.9	Mailing		459,152	403,284	55,868
44	675.10	Subscriptions		2,214	4,329	(2,115)
45	675.11	Write off of expenditures for preliminary surveys, plans, investigations etc., included in Account 183.0 - Preliminary Survey and Investigation Charges, relative to projects which have been abandoned.				
46	675.12	Travel	416	23,066	18,624	4,442
47	675.13	Education	415	27,665	12,272	15,393
48	675.14	Charitable Contributions				
49		Total Miscellaneous Expenses		2,941,186	3,171,812	(230,626)
50		Total Water Operation and Maintenance Expense Accounts		24,605,823	21,602,578	3,003,245

3.5 Operation and maintenance by function

- Water system functions are comparable to those of other utilities
- Functional operations of water systems (USoA, 1996)
 - ▶ Source of supply and pumping expenses – operations and maintenance
 - ▶ Water treatment expenses – operations and maintenance
 - ▶ Transmission and distribution expenses – operations and maintenance
 - ▶ Customer accounts expenses
 - ▶ Administrative and general expenses
- Allocation of costs by account across functions creates a detailed matrix
 - ▶ Functionalization is also relevant to cost allocation (see Part 5)



3.5 Operation and maintenance subaccounts (USoA, 1996)

Acct. No.	Account Title	Source of Supply & Expense Operations	Source of Supply & Expense Maintenance	Water Treatment Expenses Operations	Water Treatment Expenses – Maint.	Trans. & Distribution Expenses - Operations	Trans. & Distribution Expense Maintenance	Customer Accounts Expenses	Admin. & General Expenses
601.	Salaries and Wages - Employees	601.1	601.2	601.3	601.4	601.5	601.6	601.7	601.8
603.	Salaries and Wages – Officers, Directors, and Majority Stockholders	603.1	603.2	603.3	603.4	603.5	603.6	603.7	603.8
604.	Employee Pensions and Benefits	604.1	604.2	604.3	604.4	604.5	604.6	604.7	604.8
610.	Purchased Water	310.1	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
615.	Purchased Power	615.1	XXXXXX	615.3	XXXXXX	615.5	XXXXXX	615.7	615.8
616.	Fuel for Power Production	616.1	XXXXXX	616.3	XXXXXX	616.5	XXXXXX	616.7	616.8
618.	Chemicals	618.1	618.2	618.3	618.4	618.5	618.6	XXXXXX	XXXXXX
620.	Materials and Supplies	620.1	620.2	620.3	620.4	620.5	620.6	620.7	620.8
631.	Contractual Services – Eng.	631.1	631.2	631.3	631.4	631.5	631.6	631.7	631.8
632.	Contractual Services – Acct.	632.1	632.2	632.3	632.4	632.5	632.6	632.7	632.8
633.	Contractual Services – Legal	633.1	633.2	633.3	633.4	633.5	633.6	633.7	633.8
634.	Contractual Services – Management Fees	634.1	634.2	634.3	634.4	634.5	634.6	634.7	634.8
635.	Contractual Services - Testing	635.1	635.2	635.3	635.4	635.5	635.6	635.7	635.8
636.	Contractual Services – Other	636.1	636.2	636.3	636.4	636.5	636.6	636.7	636.8
641.	Rental of Building / Real Property	641.1	641.2	641.3	641.4	641.5	641.6	641.7	641.8
642.	Rental of Equipment	642.1	642.2	642.3	642.4	642.5	642.6	642.7	642.8
650.	Transportation Expenses	650.1	650.2	650.3	650.4	650.5	650.6	650.7	650.8
656.	Insurance – Vehicle	656.1	656.2	656.3	656.4	656.5	656.6	656.7	656.8
657.	Insurance – General Liability	657.1	657.2	657.3	657.4	657.5	657.6	657.7	657.8
658.	Insurance – Workman's Compensation	658.1	658.2	658.3	658.4	658.5	658.6	658.7	658.8
659.	Insurance – Other	659.1	659.2	659.3	659.4	659.5	659.6	659.7	659.8
660.	Advertising Expense	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	660.8
666.	Regulatory Commission Expense – Amortization	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	666.8
667.	Regulatory Commission Expense – Other	667.1	667.2	667.3	667.4	667.5	667.6	667.7	667.8
668.	Water Resource Conservation Expense	668.1	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
670.	Bad Debt Expense	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	670.7	XXXXXX
675.	Miscellaneous Expense	675.1	675.2	675.3	675.4	675.5	675.6	675.7	675.8

3.4 O&M expenses by function (subset of schedule 407)

409. WATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS (ALLOCATION)

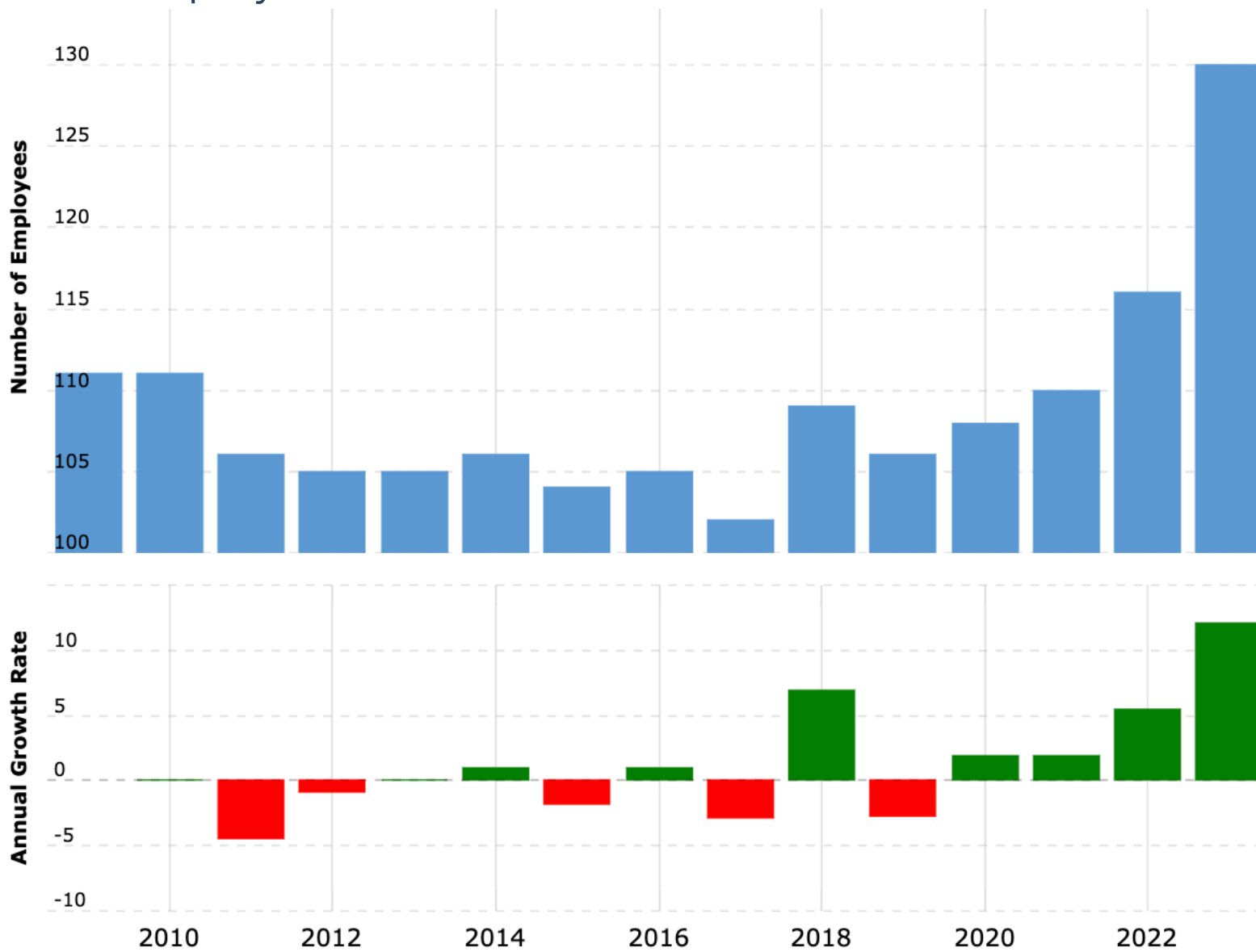
Line No.	Account Number and Title (a)	Totals from Schedule 407 (b)	Sources of Supply And Expenses - Operations (c)	Sources of Supply And Expenses - Maintenance (d)	Water Treatment Expenses Operations (e)	Water Treatment Expenses Maintenance (f)	Transmission And Distribution Operations (g)	Transmission And Distribution Maintenance (h)	Customer Accounts Expenses (i)	Administrative And General Expenses (j)
1	Salaries and Wages	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
2	601.0 Employees	7,626,411	206,569	335,057	1,149,000	227,909	1,978,249	935,512	934,092	1,860,023
3	603.0 Officers, Directors, and Majority Stockholders	432,232								432,232
4	Total Salaries and Wages *	8,058,643	206,569	335,057	1,149,000	227,909	1,978,249	935,512	934,092	2,292,255
5	Contractual Service	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
6	631.0 Engineering **	71					71			
7	632.0 Accounting **	270,837								270,837
8	633.0 Legal **	160,980								160,980
9	634.0 Management Fees **									
10	635.0 Contract Services Testing	44,076			44,076					
11	636.0 Other - Maintenance **	3,861,648	11,157	180,482	325,383	269,693	4,672	2,155,165	174,935	741,161
12	Total Contractual Service	4,337,612	11,157	180,482	369,459	269,693	4,743	2,155,165	174,935	1,172,978
13	Miscellaneous Expense	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
14	675.3 Communications Service	227,226	36,856		48,613		83,161		24,176	34,420
15	675.12 Travel***	23,066	2,083		1,401		6,571		394	12,617
16										
17										
18	Total Miscellaneous Expenses	250,292	38,939		50,014		89,732		24,570	47,037
19	TOTALS	12,646,547	256,665	515,539	1,568,473	497,602	2,072,724	3,090,677	1,133,597	3,512,270

3.6 Personnel-related expenses

- Personnel
 - ▶ 601. Salaries and Wages - Employees
 - Compensation (salaries, bonuses and other consideration of services) paid or accrued to employees of the utility company for work related to operation and maintenance of that utility. This account shall not include the salaries and wages of officers, directors or majority stockholders of the utility company.
 - ▶ 603. Salaries and Wages - Officers, Directors and Majority Stockholders
 - Compensation (salaries, bonuses and other consideration for services) paid or accrued to officers, directors or majority stockholders of the utility company.
 - ▶ 604. Employee Pensions and Benefits
 - All accruals under employee pension plans to which the utility has irrevocably committed such funds, and payments for employee accident, sickness, hospital and death benefits or insurance therefor. Include also expenses for medical, educational, or recreational activities of employees.
- Executive compensation
 - ▶ Salaries and other compensation, including performance incentives (possible caps)
 - ▶ Transparency in reporting and oversight and for comparative purposes
 - ▶ Allocation between shareholders and ratepayers

Q. Should regulators allow recovery of performance incentives for utility executives?

3.6 York: employment trend



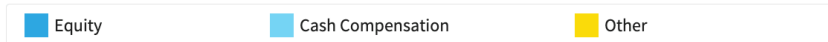
3.6 Poll: executive compensation

- Should regulators cap utility executive pay recoverable from ratepayers?
 - A. Yes
 - B. No
 - C. Not sure

3.6 Executive compensation (salary.com)

For its 2022 fiscal year, YORK WATER CO, listed the following executives on its annual proxy statement to the SEC.

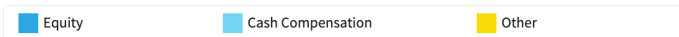
[View as table](#)



NAME AND TITLE	TOTAL COMPENSATION
Joseph T. Hand President, Chief Executive Officer	\$437,771
Matthew E. Poff CPA Chief Financial Officer	\$297,920
Mark A. Wheeler Chief Operating Officer	\$306,030

For its 2022 fiscal year, ESSENTIAL UTILITIES INC, listed the following executives on its annual proxy statement to the SEC.

[View as table](#)



NAME AND TITLE	TOTAL COMPENSATION
Christopher H. Franklin President and Chief Executive Officer, Director	\$4,569,047
Christopher P. Luning EVP and General Counsel	\$1,219,734
Richard S. Fox EVP and Chief Operating Officer	\$1,539,693
Daniel J. Schuller EVP and Chief Financial Officer Principal Financial Officer	\$1,553,899
Matthew R. Rhodes EVP, Strategy & Corporate Development	\$1,375,505
Colleen M. Arnold President, Aqua	\$764,236



3.6 York: director compensation

103. DIRECTORS

1. Provide the following information on each director of the respondent who held office at any time during the year. Include in column (a) abbreviated titles of the directors who are officers of respondent.
2. Designate by an asterisk names of members of Executive Committee, and by double asterisk the Chairman of the Executive Committee.

Line No.	Directors Name and Title (a)	Principal Business Address					Term Began (g)	Term Expires (h)	Meetings Attended (i)	Fees Paid (j)
		Street Address (b)	City (c)	State (d)	Zip (e)	Telephone (f)				
1	George W. Hodges, Chairman**	130 East Market Street	York	PA	17401	(717) 845-3601	5/3/2021	5/6/2024	10	43,851
2	George Hay Kain III	130 East Market Street	York	PA	17401	(717) 845-3601	5/3/2021	8/27/2023	6	23,938
3	Michael W. Gang, Esq.*	130 East Market Street	York	PA	17401	(717) 845-3601	5/3/2021	5/6/2024	8	33,411
4	Ernest J. Waters	130 East Market Street	York	PA	17401	(717) 845-3601	5/1/2023	5/4/2026	15	40,211
5	Steven R. Rasmussen, CPA	130 East Market Street	York	PA	17401	(717) 845-3601	5/2/2022	5/5/2025	14	42,291
6	Robert P. Newcomer	130 East Market Street	York	PA	17401	(717) 845-3601	5/4/2020	5/1/2023	6	16,385
7	Jody L. Keller, SPHR	130 East Market Street	York	PA	17401	(717) 845-3601	5/2/2022	5/5/2025	9	34,701
8	Erin C. McLaughlin	130 East Market Street	York	PA	17401	(717) 845-3601	5/1/2023	5/4/2026	15	40,261
9	Cynthia A. Dotzel, CPA	130 East Market Street	York	PA	17401	(717) 845-3601	5/2/2022	7/11/2023	2	22,060
10	Jeffrey R. Hines, P.E.*	130 East Market Street	York	PA	17401	(717) 845-3601	5/3/2021	5/6/2024	8	33,411
11	Joseph T. Hand, Pres/CEO*	130 East Market Street	York	PA	17401	(717) 845-3601	5/1/2023	5/4/2026	8	0
12	Paul R. Bonney, Esq.	130 East Market Street	York	PA	17401	(717) 845-3601	6/1/2022	5/5/2025	12	34,821
13	Laura T. Wand	130 East Market Street	York	PA	17401	(717) 845-3601	5/1/2023	5/4/2026	7	21,617
14	Douglas S. Brossman	130 East Market Street	York	PA	17401	(717) 845-3601	9/1/2023	5/6/2024	2	9,453
15										

* Executive Committee

** Chairman of Executive Committee

3.6 York: payroll and pension contributions

409-A. EMPLOYEE PENSIONS AND BENEFITS SUPPORTING SCHEDULE Account No. 604.0

This schedule should include a breakdown of the accounts that constitute the ending balance in Account No. 604.0 - Employee Pensions and Benefits.

Line No.	Benefit Type (a)	Employees (c)	Total Expenses for	
			Current Year (d)	Prior Year (e)
1	Pension	44	205,779	200,256
2	Life Insurance	116	13,277	12,086
3	Health Insurance	105	1,423,645	1,102,146
4	Dental	108		
5	Eye Care	108		
6	Prescriptions	105		
7	Employee Recognition		16,771	4,528
8	Physicals		11,325	11,058
9	Tuition Assistance	5	24,027	8,539
10	Death Benefits		13,390	-57,946
11	Other Post Employee Benefits			
12	401K	113	379,872	344,543
13	Employee Stock Option Program	66		
14	Others (Specify)		107,226	117,164
15	TOTALS		2,195,312	1,742,374

410. EMPLOYEE AND PAYROLL STATISTICS

- Show hereunder the details called for concerning the number of officers and employees at the beginning and end of the year, and the aggregate salaries and wages for the year.
- The data shall be itemized according to the department payroll classification maintained by Respondent at the end of the year (such as, for example, executive, accounting, treasury, engineering, etc).

Line No.	Payroll Classification (a)	Number Beginning of Year (b)	Number End of Year (c)	Aggregate Salaries and Wages for the Year (d)
1	Main Office (Customer Service, Accounting, IT, Billing,	34	35	3,226,347
2	Meter Reading, Human Resources, Executive)			
3				
4	Distribution (Purchasing, Engineering, Operations, Construction, GIS,	49	60	2,913,761
5	Materials and Supplies)			
6				
7	Pumping Station (Maintenance and Grounds)	13	13	769,535
8				
9	Filter Plants (Water Treatment)	13	11	1,149,000
10				
40		109	119	8,058,643

3.6 Contractual services

411-A. CONTRACTUAL SERVICES SUPPORTING SCHEDULE Account Nos. 631.0, 632.0 and 633.0

Provide a breakdown of **Engineering Expense** - Account No. 631.0.

Line No.	Description of Project (a)	Expense (b)
1	GIS Data	71
7	TOTAL	71

Provide a breakdown of **Accounting Expense** - Account No. 632.0.

Line No.	Type of Service (a)	Expense (b)
1	Audit Fees	199,061
2	Tax Services	20,401
3	Other	51,375
4		
5		
6		
7	TOTAL	270,837

Provide a breakdown of **Legal Expense** - Account No. 633.0.

Line No.	Description of Service (a)	Expense (b)
1	General	27,197
2	SEC Compliance	20,040
3	Customer Related	13,810
4	Debt Agreements	1,240
5	Corporate Governance	1,390
6	Territory Expansion	61,651
7	Employee/Labor Related	35,218
8	LTIP	434
9		
10	TOTAL	160,980

3.6 Personnel travel expenses

416. TRAVEL EXPENSE SUPPORTING SCHEDULE - Account No. 675.12

Provide a breakdown of Travel Expense - Account No. 675.12

Line No.	Event (a)	Travel Expenses (b)	Lodging Expenses (c)	Meal Expenses (d)	Entertainment Expenses (e)	Total Expense (f)
1	Various - Source of Supply			2,083		2,083
2	Various - Water Treatment	42	950	409		1,401
3	Various - Transmission & Distribution	292	698	5,581		6,571
4	Various - Customer Accounts	158		236		394
5	Various - Administrative & General	2,620	2,176	7,821		12,617
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16	TOTALS	3,112	3,824	16,130		23,066

3.7 Allowances and disallowances

- Expenditures deemed necessary, prudent, and economical are typically allowed
 - ▶ Including costs associated with compliance with other policies (e.g., environmental)
 - ▶ Boards of directors may also want to review spending in certain areas
- Disallowances are costs that cannot be recovered from ratepayers
 - ▶ Are used to impose regulatory discipline on the monopoly
 - ▶ May be characterized as nonutility expenses
- Common full or partial disallowances ("other people's money")
 - ▶ Imprudent or excessive operating expenses (always)
 - ▶ Fines, penalties, liabilities, and legal defense (may depend on culpability)
 - ▶ Advertising and “loyalty-building” expenses (except public service announcements)
 - ▶ Political and lobbying expenses (IRS, 26 U.S.C. §162) – even if rationalized
 - ▶ Association dues connected to political purposes (campaigns, lobbying)
 - ▶ Charitable contributions (typically) – even if rationalized and especially if political
 - ▶ Research and development by utility or industry organizations (sometimes)
 - ▶ Life insurance on officers and employees where utility is beneficiary
 - ▶ Executive compensation or bonuses (sometimes at some levels)

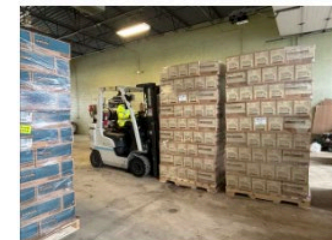
Q. How much did York spend on advertising, charity, and R&D?

3.7 Poll: leave room for dessert

- Should a utility incur a disallowance for providing warehouse space for Scout cookies?
 - ▶ Yes
 - ▶ No

York Water's Distribution Center Houses Regional Girl Scout Troops' Cookies:

It's cookie time! Each year, for 24 hours, York Water shifts its focus from water to cookies. It is during this time that its distribution center becomes the central hub for all regional Girl Scout troops to collect the over nearly 162,000 boxes of cookies they sold. "It is a pleasure to support the Girl Scout experience – and all the cookie eaters in our area – year after year," said York Water. You can also search #GirlScoutsInTheHeartOfPA on social media to see more content.



3.7 Disallowed (non-utility) expenses (USoA, 1996) ⓘ

- 426. Miscellaneous Nonutility Expenses
- This account shall contain all expenses other than expenses of utility operations and interest expense...
 - ▶ Expenses disallowed in a proceeding before the Commission
 - ▶ Amortization of an Acquisition Adjustment not approved by the Commission
 - ▶ Depreciation associated with plant not used and useful in the public service
 - ▶ Depreciation of Nonutility Plant
 - ▶ Imprudent expenses
 - ▶ Donations for charitable, social or community welfare purposes
 - ▶ Life insurance on officers and employees where utility is beneficiary (net premiums less increase in cash surrender value of policies)
 - ▶ Penalties or fines for violations of statutes pertaining to regulation

3.7 Disallowed (non-utility) expenses (continued) ⓘ

- ▶ Expenditures for the purpose of:
 - a. Influencing public opinion with respect to the election or appointment of public officials, or the adoption, repeal, revocation or modification of referenda, legislation or ordinances.
 - b. Influencing public opinion with respect to obtaining approval, modification or revocation of franchises.
 - c. Influencing the decisions of public officials not including such expenditures which are directly related to appearances before regulatory or other governmental bodies in connection with the utility's existing or proposed operations.
- ▶ Loss relating to investments in securities written-off or written-down.
- ▶ Loss on sale of investments.
- ▶ Loss on reacquisition, resale or retirement of utility 's debt securities.
- ▶ Preliminary survey and investigation expenses related to abandoned projects, when not written-off to the appropriate operating expense account.
- ▶ Golf club dues, social club dues and service club dues (Kiwanis, Rotary, etc.) house charges and items of a similar nature whether such expenditures are made directly by the utility or indirectly by payment or reimbursement to associated companies, officers, or other employees, or by any other direct or indirect means.

3.8 Depreciation expense

- Depreciation expense is included in revenue requirements
 - ▶ A “non-cash” expense for the systematic “return of” investment to shareholders
 - ▶ Brings cashflow to the utility – revenue without an outlay (expenditure)
 - ▶ Cash is paid upfront at the time of a long-term capital investment - and must be recovered
- Depreciation vs. amortization expenses
 - ▶ Depreciation is used to spread cost over the useful life of plant assets systematically – also serves intergenerational equity goals (temporal cost allocation)
 - ▶ Amortization is comparable but applies to intangible non-plant assets that have value over time (e.g., computer software, regulatory assets, water rights) – also used for policy purposes
- Cash flow from depreciation can be reinvested in capital projects at utility’s discretion
 - ▶ Utilities are not obligated to reinvest depreciation expense – but it may be retained
 - ▶ Should not be used to forestall rate increases needed to cover operating expenses
 - ▶ Current customers are not obligated to build reserves for replacement
- Two common methods of depreciation
 - ▶ Straight-line (same amount each period)
 - ▶ Accelerated (more amounts in earlier periods)
- Depreciation expense must be synchronized with rate base components

▶ Accumulated depreciation is recorded on the balance sheet (see Part 2)

3.8 Depreciation expense for water ⓘ

- 403. Depreciation Expenses (USoA, 1996)
 - ▶ A. This account shall be charged with depreciation credited to account 108 - Accumulated Depreciation of Water Plant and credited with amortization debited to account 272 - Accumulated Amortization of Contributions in Aid of Construction.
 - ▶ Depreciation shall be accrued on a straight-line remaining life basis or straight-line basis, as required by the Commission.
 - ▶ A single composite depreciation rate may be used if approval from the Commission is obtained

Q. Why are utilities entitled to a return of and on investment?

3.8 Recording depreciation expense for CIAC (water)

- Accounting treatment at year 10 for a 20-year asset (straight-line method)

BALANCE SHEET Utility plant and CIAC (end of period)	All investor- supplied capital	Some CIAC	Rate base impact of no amort. credit
101. Utility plant in service	100,000	100,000	100,000
108. Accumulated depreciation	(50,000)	(50,000)	(50,000)
Net utility plant	50,000	50,000	50,000
271. Contributions in aid of construction	0	(20,000)	(20,000)
272. Accumulated amortization of CIAC	0	10,000	0
Net rate base	50,000	40,000	30,000
INCOME STATEMENT Utility operating accounts (annual period)			
403. Depreciation expense (dr)	5,000	5,000	5,000
407. Amortization expense (cr)	0	(1,000)	0
Net depreciation expense	5,000	4,000	5,000

3.8 Recording depreciation expense for CIAC (water)

- Accounting treatment at year 20 for a 20-year asset (straight-line method)

BALANCE SHEET Utility plant and CIAC (end of period)	All investor- supplied capital	Some CIAC	Rate base impact of no amort. credit
101. Utility plant in service	100,000	100,000	100,000
108. Accumulated depreciation	(100,000)	(100,000)	(100,000)
Net utility plant	0	0	0
271. Contributions in aid of construction	0	(20,000)	(20,000)
272. Accumulated amortization of CIAC	0	20,000	0
Net rate base	0	0	?
INCOME STATEMENT Utility operating accounts (annual period)			
403. Depreciation expense (dr)	5,000	5,000	5,000
407. Amortization expense (cr)	0	(1,000)	0
Net depreciation expense	5,000	4,000	5,000

3.8 Recording depreciation expense for CIAC (water)

- Accounting treatment at year 20 for a 20-year asset

BALANCE SHEET Utility plant and CIAC (end of period)	All investor- supplied capital	Some CIAC	Rate base impact of no amort. credit
101. Utility plant in service	100,000	100,000	100,000
108. Accumulated depreciation	(100,000)	(100,000)	(100,000)
Net utility plant	0	0	0
271. Contributions in aid of construction	0	(20,000)	(20,000)
272. Accumulated amortization of CIAC	0	20,000	0
Net rate base	0	0	(20,000)
INCOME STATEMENT Utility operating accounts (annual period)			
403. Depreciation expense (dr)	5,000	5,000	5,000
407. Amortization expense (cr)	0	(1,000)	0
Net depreciation expense	5,000	4,000	5,000

3.9 Income and other taxes

- Types of taxes
 - ▶ Federal and state income taxes (revenue-driven)
 - ▶ Federal, state, and local payroll taxes (company's share)
 - ▶ Local property taxes and franchise fees

- Ratemaking
 - ▶ Ratepayers pay utility's revenue-based income and other taxes
 - ▶ Revenues to be collected from ratepayers are "grossed up" using "conversion factors" (see Part 4)
 - ▶ Conversion recognizes the effect of income taxes (and changes to other items) on revenue requirements and earnings
 - ▶ Conversion factor =
 - $1 / (1 - \text{tax rate})$

419-A. TAXES OTHER THAN INCOME, INCOME TAXES AND DEFERRED TAXES DURING YEAR
Accounts Nos. 408, 409, 410, 411 and 412

Line No.	Kind of Tax (See Instruction 5)	BALANCE AT BEGINNING OF YEAR	BY DEBIT OR CREDIT TO ACCOUNT
1	(a)	(b)	(c)
2	Taxes Other Than Income Account (408)		
3	Utility Reg Assessment Fees Acct 408.10		334,616
4	Property Taxes Acct (408.11)		404,429
5	Payroll Taxes Acct (408.12)		695,669
6	Other Taxes and Licenses Acct (408.13)		(51,874)
7	Other Than Inc., Other Inc. and Ded. Acct 408.2		
8			
9			
10	Total - Taxes Other Than Income	-	
11			
12	Income Taxes Acct (409)		
13	Fed Inc Taxes, Util. Oper. Inc Acct (409.10)		581,852
14	State Inc. Taxes, Util. Oper. Inc. Acct. (409.11)		278,615
15	Local Inc. Taxes, Util. Oper. Inc. Acct. (409.12)		
16	Inc. Taxes, Other Inc. and Ded. Acct (409.20)		
17	Inc. Taxes, Extraordinary Items Acct (409.30)		
18	Other Income Taxes (specify)		
19			
20	Total - Income Taxes	-	860,467
21			
22	Deferred Income Taxes Acct-(410)		
23	Def. Fed. Inc. Taxes Acct-(410.10)		321,191
24	Def. State Inc. Taxes Acct (410.11)		(56,814)
25	Def. Local Inc. Taxes Acct (410.12)		
26	Other Deferred Taxes Acct. (410.20)		
27			
28	Total - Deferred Income Taxes		264,377
29			
30	Deferred Inc. Taxes Credit Acct-(411)		
31			
32			
33			
34			
35	Investment Tax Credits Acct (412)		(35,354)

3.9 Reconciliation of net income based on taxes

- Reconciliation and synchronization
 - ▶ Deferred income taxes
 - ▶ Depreciation
 - ▶ Tax-deductible interest expense

- Net income
 - ▶ Differs for regulatory and tax purposes
 - ▶ Shown on a schedule in the annual report to regulators
 - ▶ Must be reconciled – see IRS Schedule M

422-1. RECONCILIATION OF NET INCOME SHOWN ON SCHEDULE 400 WITH FEDERAL NORMAL TAX NET INCOME (Continued)

Line No.	Particulars (a)	Amount (b)
1	Net Income for the year per Schedule 400	22,844,985
2	Adjustments made to determine taxable income*	
3		
4	Current and Deferred Income Taxes	1,089,490
5	Depreciation	2,477,571
6	Increase in Bad Debt Reserve	150,000
7	Debt Amortization	107,409
8	Deferred Rate Case Expense, Service Life Study, and Service Line Replacements	89,451
9	Stock Based Compensation	20,930
10	Nondeductible Parking	7,982
11	Nondeductible Holiday/Vacation	62,020
12	Nondeductible Lobbying	23,749
13	Nondeductible Meals/Entertainment	15,537
14	Prior Year State Tax Adjustment	12,457
15	Dividends of Domestic Corporations	(9,192)
16	Nondeductible Postretirement Benefits	9,390
17	Prepaid Expenses	(36,662)
18	Amortization of Acquisition Adjustments	(53,196)
19	Deferred Compensation	143,077
20	Tax Exempt Interest	(192,122)
21	State Tax Provision	(291,072)
22	Capitalized Expenses for Tank Painting	
23	Cost of Removal	(3,086,045)
24	Tax Repair Expenditures	(18,657,101)
25	Charitable Contribution Carryover	(90,857)
26	Nondeductible Penalties	502
27	Net Operating Loss	(1,849,409)
28		
29		
30		
31		
32	Net additions to or deductions from amount shown on Line 1	(20,056,091)
33		
34	Federal surtax net income (surtax \$585,668 at applicable rate of tax of 21%)	2,788,894

3.9 Income and other taxes ⓘ

- 408. Taxes Other Than Income (USoA, 1996)
 - ▶ A. These accounts shall include the amount of ad valorem, gross revenue or gross receipts taxes, regulatory agency general assessments for purposes of public utility regulation, state unemployment insurance, franchise taxes, federal excise taxes, social security taxes, and all other taxes assessed by federal state, county, municipal, or other local governmental authorities, except income taxes.
- 409. Income Taxes (USoA, 1996)
 - ▶ A. These accounts shall include the amounts of local, state and federal income taxes on income properly accruable during the period covered by the income statement to meet the actual liability for such taxes. Concurrent credits for the tax accruals shall be made to account 236 - Accrued Taxes, and as the exact amounts of taxes become known, the current tax accruals shall be adjusted by charges or credits to these accounts unless such adjustments are properly included in account 439 - Adjustments to Retained Earnings, so that these accounts as nearly as can be ascertained shall include the actual taxes payable by the utility (See Accounting Instruction 8 for prior period adjustments).
- 410. Provision for Deferred Income Taxes (USoA, 1996)
 - ▶ A. Accounts 410.10, 410.11, 410.12 and 410.20 shall be debited and accounts 281, 282, or 283 Accumulated Deferred Income Taxes - Accelerated Amortization, Liberalized Depreciation, or Other, shall be credited with amounts equal to any current deferrals of taxes on income or any allocations of deferred taxes originating in prior periods, as provided by the texts of accounts 190, 281, 282, and 283. No credit amounts appropriately includible in account 411.10- or 411.20 shall be netted against entries required to be made to these accounts.

3.9 Income-tax timing differences

- Timing differences are considered when normalizing test year data
- Types of timing differences
 - ▶ Temporary difference between tax and book recording of costs (asset or expense)
 - ▶ Difference between book income and tax income that originates in one period and reverses (or turns around) in one or more later periods
- Effects of timing differences
 - ▶ Some reduce income taxes that would otherwise be payable currently
 - ▶ Some increase income taxes that would otherwise be payable in the future
- Different depreciation rates affect what is expensed and when
 - ▶ Affects taxable net income

Journal entry for comprehensive inter-period tax allocation (normalization)	
Debit	Credit
Income tax expense: \$10,000	Income tax payable: \$5,000

3.9 Income tax normalization

- Income tax normalization or “comprehensive inter-period income-tax allocation”
 - ▶ An accounting method used in ratemaking to address the effects on income taxes of timing differences in expenses or revenues
 - ▶ Accumulated deferred income taxes are recorded as a liability on the balance sheet (see Part 2)
- Tax normalization for public utilities (FERC, 18 CFR § 35.24)
 - ▶ “(1) Tax normalization means computing the income tax component as if the amounts of timing difference transactions recognized in each period for ratemaking purposes were also recognized in the same amount in each such period for income tax purposes.
 - ▶ (2) Timing differences means differences between amounts of expenses or revenues recognized for income tax purposes and amounts of expenses or revenues recognized for ratemaking purposes, which differences arise in one time period and reverse in one or more other time periods so that the total amounts of expenses or revenues recognized for income tax purposes and for ratemaking purposes are equal.”
- Tax policies may affect regulatory accounting treatment
 - ▶ Federal Internal Revenue Code (1954) allowed accelerated depreciation
 - ▶ Led to flow-through accounting to recognize the income tax expense in ratemaking
 - ▶ Tax Reform Act of 1969 limited flow-through from depreciation-related tax expenses
 - ▶ Economic Recovery Tax Act of 1981 ended the flow-through of the tax benefits

3.9 Income tax normalization

		Tax basis	Regulatory basis (rates)	
			Flow through (past practice)	Normalization (current practice)
1	Revenues	\$1,000,000	\$1,000,000	\$1,000,000
2	Expenses	(\$600,000)	(\$600,000)	(\$600,000)
3	Depreciation	(\$200,000)	(\$100,000)	(\$100,000)
4	Interest	(\$100,000)	(\$100,000)	(\$100,000)
5	Taxable income	\$100,000	\$200,000	\$200,000
6	Income tax expense (21%)	(\$21,000)	(\$21,000)	(\$42,000)
7	Net income	\$79,000	\$179,000	\$158,000
8	Deferred income tax (liability)		\$0	\$21,000

3.9 Federal tax adjustment

- Federal tax reform in 2018 lowered the corporate tax rate from 35% to 21%
- For York, this resulted in a tax adjustment credit of \$2,117,143, which translated to a 4.29% credit value applicable to rates

**The York Water Company
York, Pennsylvania**

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17. Federal Tax Adjustment Credit (FTAC)

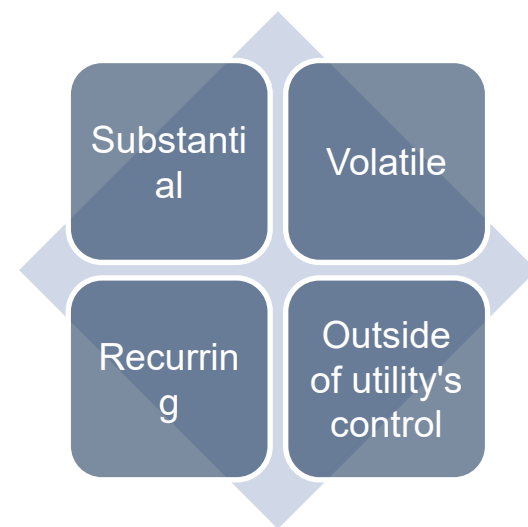
Federal Tax Adjustment Credit (FTAC)

The FTAC will refund the difference in revenue requirement created by the Tax Cuts and Jobs Act (TCJA) plus interest. The amount to be returned shall be \$2,117,143. A credit value of 4.29% will apply to all charges except the DSIC during the period March 1, 2019 through February 29, 2020 to pass the January 1, 2018 through February 28, 2019 revenue requirement change created by the TCJA to customers.

After the twelve-month period elapses, the Company will prepare a reconciliation of the difference between the calculated refund of \$2,117,143 and the actual amount credited to customers by the FTAC as applied. Any such difference will be refunded/recouped over an additional one-month period commencing April 1, 2020.

3.10 Cost-adjustment mechanisms

- Originally applied to variable operating expenses meeting four criteria
 - ▶ Substantial, recurring, volatile, and largely outside utility's control
- Known as cost trackers, riders, and surcharges for adjusting rates to costs
 - ▶ Allow adjustments to customer rates when the actual costs incurred depart from a baseline amount determined in a rate case
 - ▶ Provided for by approved tariff "clauses" – separate from base rates
 - ▶ Must be carefully reviewed and reconciled – not "automatic" and not "mechanized"
 - ▶ Not the same as revenue assurance mechanisms, such as decoupling
- Meant to prevent financial hardship and earnings erosion between rate cases
 - ▶ Considered "credit positive" by rating agencies (bonds)
- Distinct from revenue-adjustment mechanisms (decoupling)



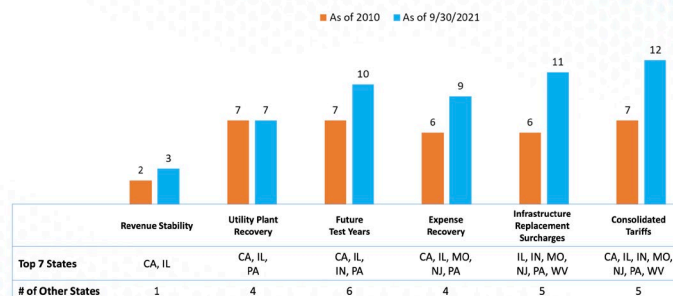
3.10 Cost-adjustment mechanisms

- Types of costs that may be tracked
 - ▶ Fuel or energy cost adjusters
 - ▶ New operating systems or plant
 - ▶ Regularized infrastructure replacement
 - ▶ Bad debt (uncollectible)
 - ▶ Taxes and property valuation
 - ▶ Special programs (e.g., efficiency)
 - ▶ Regulatory compliance costs

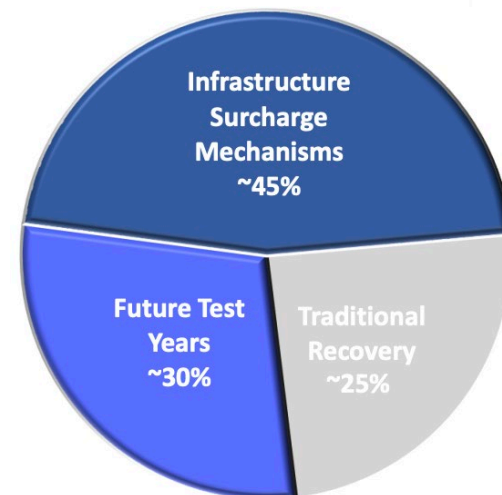
- Expanded or proposed to include
 - ▶ Capital-related costs that do not meet the criteria
 - ▶ Rapidly rising costs (undermining incentives)

- May be used for special purposes
 - ▶ To incentivize accelerated spending (FERC adders, DSIC)
 - ▶ To fund public benefits (form of taxation)

Constructive Regulatory Mechanisms Across Our Footprint



Capital Recovery (2024-2028 Plan)



3.10 Rationales and concerns

■ Rationales

- ▶ Reduces rate case frequency and expense, and regulatory deferrals (“lag”)
- ▶ Lowers risk and thus cost of debt to utilities (with possible efficiency offsets)
- ▶ Prevents both shortfalls and windfall revenues to utilities
- ▶ Mitigates rate shock through gradualism in rate adjustments
- ▶ Consistent with economic price signals based on the cost of service
- ▶ May be needed to address urgent issues (pipeline safety)

■ Concerns

- ▶ Undermines disciplinary effect of lag – upside and downside risk “cuts both ways”
- ▶ Rate-case savings may be limited – and at cost of efficient performance
- ▶ Overuse that shifts cost or revenue risks from shareholders to ratepayers
- ▶ Asymmetrical and unidirectional (matching principle) focusing only on negative
- ▶ Neglects dynamic and interrelated revenue and expenditure effects
- ▶ Narrows scope of review (single-issue ratemaking)
- ▶ Automates recovery and limits review of prudence and efficiency
- ▶ Distorts CAPEX vs. OPEX incentives and deployment based on recovery
- ▶ Weakens incentives for strategic planning and optimization for large and rising costs
- ▶ Masks rate increases over time

3.10 State tax surcharge in the tariff

The York Water Company
York, Pennsylvania

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To
Water-Pa. P.U.C. No. 14
Forty-second Revised Page No. 40
Canceling
Fifty-first Revised Page No. 40

12. State Tax Adjustment Surcharge

- 12.1 In addition to the charges provided in this tariff, a surcharge of (0.02%) (D)
 will apply to all charges for service rendered on or after January 1, 2025. (C)

The above surcharge will be recomputed, using the same elements prescribed by the Commission.

- a. Whenever any of the tax rates used in the calculation of the surcharge are changed; and
- b. Whenever the utility makes effective any increased or decreased rates.

The above recalculation will be submitted to the Commission within 10 days after the occurrence of the event or date which occasions such recomputation; and, if the recomputed surcharge is less than the one then in effect, the Company will, and if the recomputed surcharge is more than the one then in effect, the Company may, submit with such recomputation a tariff or supplement to reflect such recomputed surcharge, the effective date of which shall be 10 days after filing.

3.11 System improvement charges

- Pennsylvania's distribution system improvement charge (DSIC)
- A system improvement charge appears as a surcharge on customer bills
 - ▶ A percentage applied to the total amount billed to customers under the company's otherwise applicable rates and charges,
 - ▶ Excludes amounts for public fire protection service and State Tax Adjustment Surcharge
- Consumer protections can be built into system improvement charges
 - ▶ A cap on the rate – currently at 5%
 - ▶ Annual reconciliation of recoverable costs and revenues associated with the charge by the PUC pursuant to a hearing in accordance with the Public Utility Code
 - ▶ PUC audits to ensure the money is spent on DSIC-eligible projects
 - ▶ A reset to zero if the company's quarterly or annual earnings reports – subject to review by the PUC – show that the company earnings exceed the allowable rate of return used to calculate fixed costs under the system improvement charge
 - ▶ A reset to zero as of the effective date of new base rates provides prospective recovery of annual costs that had been recovered under the charge
 - ▶ Customer-notice requirements of changes in the system improvement charge

Source: http://www.puc.state.pa.us/general/consumer_ed/pdf/dsic_fs.pdf

3.11 York DSIC exhibit for 2024 (linked)

THE YORK WATER COMPANY
Distribution System Improvement Charge
Eligible Property as of March 1, 2024

<u>Eligible Property</u>	<u>To-Date Mar 2023 - Nov 2023</u>	<u>December 2023</u>	<u>January 2024</u>	<u>February 2024</u>	<u>Total</u>
Services	\$ 1,355,571	\$ 147,944	\$ 33,616	\$ 227,117	\$ 1,764,248
Meters	\$ 608,654	\$ 262,090	\$ 90,455	\$ 41,630	\$ 1,002,829
Hydrants					
Installed as In-Kind Replacements	\$ 522,560	\$ 197,358	\$ 53,071	\$ 14,720	\$ 787,709
Mains and Valves					
Installed as In-Kind Replacements	\$ 7,337,407	\$ 3,862,809	\$ -	\$ 3,361	\$ 11,203,577
Main Cleaning and Relining		\$ -	\$ -	\$ -	\$ -
Main Extensions					
Installed to Eliminate Dead-Ends and/or Implement Solutions to Regional Water Supply Problems		\$ -	\$ -	\$ -	\$ -
Unreimbursed Funds to Relocate Company Facilities due to Highway Relocations		\$ -	\$ 8,194	\$ -	\$ 8,194
	<u>\$ 9,824,192</u>	<u>\$ 4,470,201</u>	<u>\$ 185,336</u>	<u>\$ 286,828</u>	<u>\$ 14,766,557</u>

3.11 DISC in the tariff

**The York Water Company
York, Pennsylvania**

**Supplement No 150
to
Water-Pa. P.U.C. No. 14
Third Revised Page No. 64
Canceling
Second Revised Page No. 64**

15. Distribution System Improvement Charge (DSIC)

- C. Application of DSIC:** The DSIC will be expressed as a percentage carried to two decimal places and will be applied to the total amount billed to each customer for distribution service under the Company's otherwise applicable rates and charges, excluding amounts billed for public fire protection service and the State Tax Adjustment Surcharge (STAS). To calculate the DSIC, one-fourth of the annual fixed costs associated with all property eligible for cost recovery under the DSIC will be divided by the Company's projected revenue for distribution service (including all applicable clauses and riders) for the quarterly period during which the charge will be collected, exclusive of revenues from public fire protection service and the STAS.
- D. Formula:** The formula for calculation of the DSIC is as follows:

$$DSIC = \frac{(DSI * PTRR) + Dep + e}{PQR}$$

**The York Water Company
York, Pennsylvania**

**Supplement No. 162
to
Water-Pa. P.U.C. No. 14
Eighty-third Revised Page No. 66
Canceling
Eighty-second Revised Page No. 66**

15. Distribution System Improvement Charge (DSIC)

- 15.1 In addition to the charges provided in this tariff, a distribution system improvement charge of 2.20% will apply to all charges for service on or after January 1, 2025. (I)
(C)

3.12 Financial auditing for ratemaking

- Rate case auditors review the utility's filed data and related documentation
 - ▶ Audits and work papers form the basis of staff witness testimony
 - ▶ Focus is mainly on "material" (impactful) matters
 - ▶ “Symbolic” issues may be important to policymakers and precedential in regulation
 - ▶ Audits also consider actual results for previously projected costs
- Regulatory auditing presumes compliance vs. violations in financial reporting
 - ▶ Regulatory auditors can rely on the work products of certified independent (CPA) auditors for some (non-regulatory policy) issues
 - ▶ Under unusual circumstances, regulatory auditors may find fraudulent (illegal) activity, which calls for a regulatory response whether or not material
- Regulatory auditors focus on prudence and reasonableness
 - ▶ Aim is overall accuracy of reporting rather than precision (e.g., .00000123)
 - ▶ Trends, benchmarks, and comparable systems are used to screen for anomalies
 - ▶ Staff capacity and expertise are needed for implementation and enforcement
- Special audits complement ratemaking audits
 - ▶ Reconciliation audits for cost-adjustment (tracker) mechanisms
 - ▶ Audits of large projects, bidding processes, multistate companies, affiliate transactions

3.12 Records reviewed by auditors (NRCAM, 2003) ⓘ

- Affiliate agreements for inter-affiliate transactions
- Audit committee minutes
- Billing records (registers, etc.)
- Board of directors minutes
- Chart of accounts and accounts manual
- Construction work orders
- Construction budgets
- Continuing property records
- Depreciation studies
- External independent audit reports and workpapers (including exceptions to auditor recommendations)
- Franchise fee records (collection and payment)
- General ledger and subsidiary ledgers
- Income tax returns (including form 1120)
- Internal audit reports and workpapers
- Invoices
- Lead-lag studies

3.12 Audit preliminaries (NRCAM, 2003) ⓘ

- Determining the scope and purpose and focusing the audit
- Understanding the utility's accounting system
- Analyzing historical financial and operating data
- Reviewing federal regulatory reports, shareholder reports, and SEC filings
- Reviewing SEC audit reports, federal utility audit reports, and other audit reports
- Reviewing prior orders of one's own jurisdiction
- Reviewing prior audit reports and prior workpapers
- Reviewing external and internal audit reports and workpapers
- Contacting other states about common cases or common issues
- Coordinating with complaint personnel and commission engineers
- Determining the appropriateness ("staleness") of the test year
- Checking schedules and supporting documents for mathematical accuracy

3.12 Audit scope and focus

- Confirmation of reported financial statements
 - ▶ Allocation of costs between regulated and non-regulated business segments
- Validating data completeness, correctness, and consistency
 - ▶ Verification and documentation of “known and measurable” expenditures
 - ▶ Identification of interrelated and “missing” items, and errors in calculations
- Matching (synchronizing) revenues and expenditures for the test period
 - ▶ Incurrence of costs inside or outside of test-year period
 - ▶ Assessment of nonrecurring expenses due to abnormal or catastrophic events
- Material matters affecting returns (e.g., one basis point or .01%)
 - ▶ Reflection of significant changes in cost (increases and decreases)
 - ▶ Economically relevant items, such as wages, pensions, depreciation
- Matters of policy and principle – even if otherwise nonmaterial
 - ▶ Consistency with commission policies, rules, and prior orders
 - ▶ Assessment of prudence and efficiency in capital and operating expenditures
 - ▶ Politically sensitive items, such as political activities and executive compensation

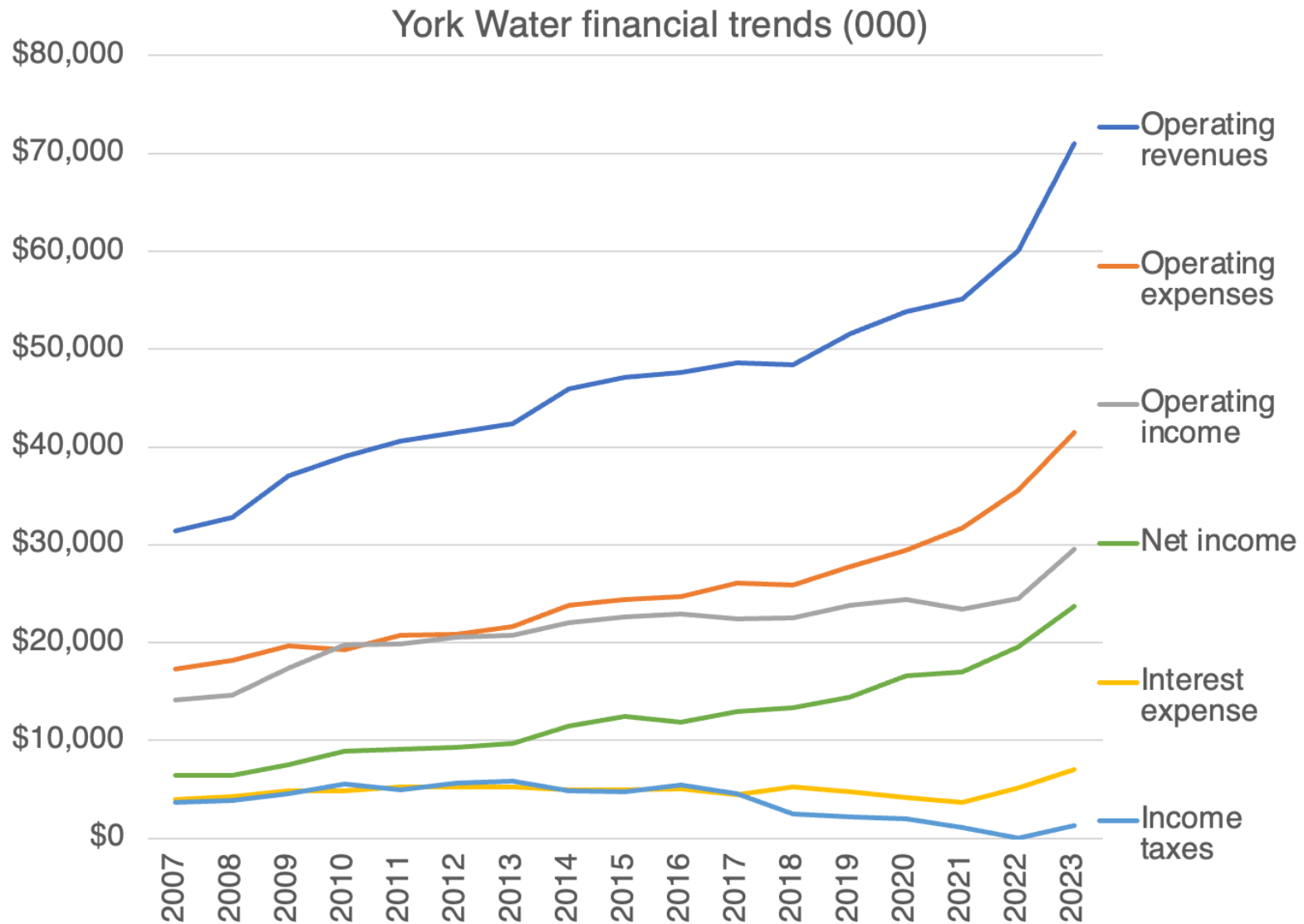
Q. What are some examples of material and nonmaterial matters?

3.12 Trend analysis

- Historical data analysis is used to assess trends and anomalies
 - ▶ Rate base components, categories of revenue, categories of expense, sales units, number of customers and employees, operational data
 - ▶ Three to five years of data and 12 months of data from test year
 - ▶ Performance assessment over time – self-benchmarking
- Data come from annual reports, trial balances, etc.
 - ▶ Auditors look for relevant trends (e.g., declining sales) and variances
- Consideration is given to
 - ▶ Large investments (major plant additions or retirements)
 - ▶ Seasonal expenses
 - ▶ Anomalies in expenses

Q. What do York's trend data reveal?

3.12 Trend analysis of major items (consolidated 10-k data)



3.13 Poll: regulatory audits

- Which of the following are *not* used in a regulatory audit?
 - A. General ledgers and trial balances
 - B. Rates and charges of other utilities
 - C. Income tax and sales tax returns
 - D. SEC 10K reports and proxy statements

3.13 Poll: regulatory audits

- Which of the following are *not* used in a regulatory audit?
 - A. General ledgers and trial balances
 - B. Rates and charges of other utilities
 - C. Income tax and sales tax returns
 - D. SEC 10K reports and proxy statements

3.13 Management auditing (NRRI, 1979)

- A management audit is best viewed as a diagnostic examination
 - ▶ Identifies both areas that are well managed and areas for improvement
- Three-party audit (commission, auditor, and utility)
 - ▶ Establishes a tension between the auditor and company that does not normally exist in a company-initiated audit
- Commission-ordered management audits have a public audience
 - ▶ A commission-ordered management audit is defined as a study conducted of the effectiveness and efficiency of the operation of a regulated utility
 - ▶ These studies may be conducted by commission staff or by a team of independent, outside, management experts
 - ▶ Commission-ordered management audits represent an attempt to provide comprehensive information to the commission and ratepayers about a company's managerial performance

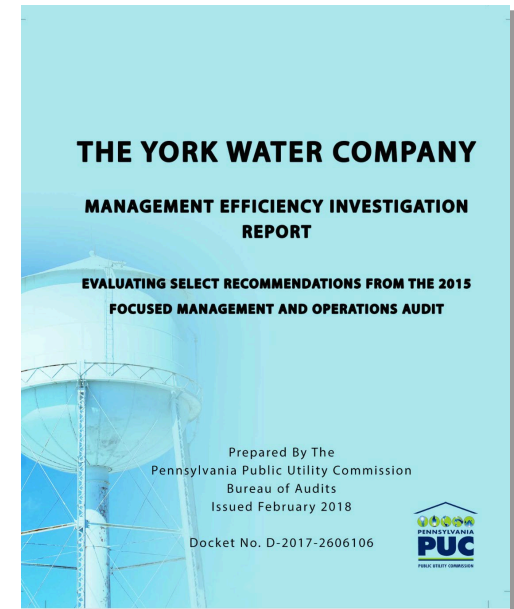
3.13 York: management efficiency audit (2014)

■ Background

- ▶ On April 15, 2014, the Management Audit Staff of the PA PUC initiated a Focused Management and Operations Audit of York
- ▶ Based on a review, the PUC's auditor selected to conduct a Management Efficiency Investigation (MEI) of York: progress in implementing 15 of the original 16 recommendations

■ Objective and scope

- ▶ Objective of this MEI was to review and evaluate York's efforts to implement certain recommendations included in the audit.
- ▶ Evaluation was limited to York's efforts in implementing the prior recommendations regarding:
 - Financial management
 - Water operations
 - Emergency preparedness
 - Materials management
 - Customer service
 - Human resources
- ▶ Auditors also reviewed York's compliance with PUC regulations regarding physical security, cyber security, emergency response, and business continuity plans



3.13 Notable improvements made

- Auditors found that York had made the following improvements
 - ▶ Implemented an automated customer call answering system that provides improved call reporting metrics
 - ▶ Added accounting safeguards to prevent possible cross subsidization between the Water Service Line Protection Program (WSLPP) and regulated utility service
 - ▶ Reduced billing lag from a range of 5.6 to 9.5 days to arrange of 5 to 6 days
 - ▶ Updated its Drought Contingency Plan
 - ▶ Developed manuals to document damage prevention practices and distribution valve inspections
 - ▶ Documented meter testing policies and procedures and electronically maintains meter records
 - ▶ Completed a customer satisfaction survey in 2015
 - ▶ Updated its human resources policies and procedures
 - ▶ Eliminated a manual and redundant time sheet data entry process

3.13 Notable improvements needed

- Auditors noted that York still needed to
 - ▶ Update the Emergency Response Plan and review it annually
 - ▶ Add contact information for law enforcement and national security related agencies' cyber teams to the Cybersecurity Plan
 - ▶ Implement physical security and safety improvements at the company's facilities
 - ▶ Strive to reduce or eliminate manual aspects of the inventory reordering process
 - ▶ Evaluate and document the cost and benefits of integrating emergency stock within the Inventory Management System

Q. What are some management issues facing utilities today?

3.13 York: report on diversity (2017)

- Work environment policies in place
 - ▶ Workforce diversity
 - ▶ Harassment
 - ▶ Procurement
 - ▶ Public affairs
 - ▶ Code of conduct
- Employee strategies identified in the mission statement
 - ▶ Provide a safe, challenging and rewarding work environment
 - ▶ Foster work force diversity
 - ▶ Actively encourage teamwork
 - ▶ Support and encourage employees to further their education and enhance their skills
 - ▶ Be sensitive to employee's roles and needs as family members
 - ▶ Support all employees in the development of their skills
 - ▶ Encourage and foster communication among all employees
 - ▶ Empower employees to make recommendations they think will improve the operational effectiveness and efficiency of the Company
 - ▶ Encourage employees to volunteer for projects and causes which enhance the community

REPORT ON DIVERSITY
TO THE PENNSYLVANIA
PUBLIC UTILITY
COMMISSION

HUMAN RESOURCES
SECTION

THE YORK WATER
COMPANY

APRIL 2017

3.13 York: workforce diversification (2017)

- York exceeds in some areas
 - ▶ Minority employment
 - Officials and administrators
 - Office and clerical
 - Skilled craft workers
 - ▶ Female employment
 - Office and clerical workers
 - Skilled craft workers

- York falls short in some areas
 - ▶ Minority employment
 - Professionals
 - Technicians
 - ▶ Female employment
 - Professionals
 - Technicians
 - Service and maintenance workers
 - Office administrators

Chart 3

**WORKFORCE DIVERSITY STATUS REPORT
THE YORK WATER COMPANY
DECEMBER 2016
FULL-TIME WORKFORCE STATED AS PERCENT**

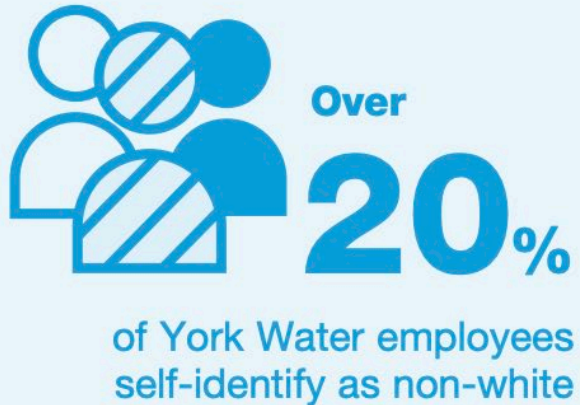
	Total Workforce				Female
	Black	SSO	White	Total	
A. Officials and Administrators	3.9%	3.9%	92.3%	100%	11.5%
B. Professionals	0%	20%	80%	100%	40%
C. Technicians	0%	0%	100%	100%	0%
D. Protective Service Workers	0%	0%	0%	0%	0%
E. Para-professionals	0%	0%	0%	0%	0%
F. Office and Clerical	13%	21.8%	65.2%	100%	91.3%
G. Skilled Craft Workers	9.1%	13.6%	77.3%	100%	11.4%
H. Service and Maintenance	0%	0%	100%	100%	0%
Total	7.7%	12.5%	79.8%	100%	29.8%

Chart 4

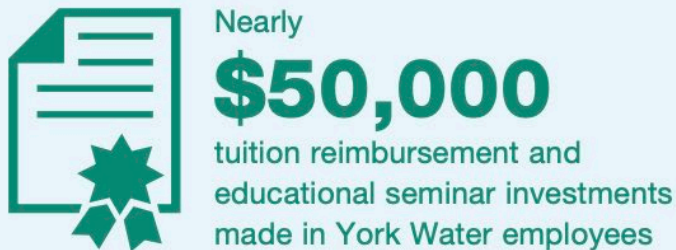
	York Water	York County Experienced Civilian Labor Force
Total Workforce	104	
White Workforce	83 (79.8%)	90.85%
Black Workforce	8 (7.7%)	4.11%
SSO Workforce	13 (12.5%)	5.03%
Female	31 (29.8%)	47.49%

3.13 York: workforce development (2023)

York Water Team Highlights



Educational Investments Made in 2023



3.14 Rate-case adjustments

- Inside test-period adjustments
 - ▶ Pro forma or attritional – forward-looking (prospective) based on known, measurable, and acceptable according to regulatory policy (prudence, used and useful, etc.)
 - ▶ Annualization spreads revenues or expenses affecting only a portion of the test year – e.g., insurance premium increases
 - ▶ Normalization smooths anomalies in the test year data – e.g., road repair expenses
- Outside test-period adjustments
 - ▶ Remove transactions that belong outside of the test year – e.g., prepaid expenses
 - ▶ Include transactions that belong in the test year – e.g., contractor work in the test year not billed until after the test year
- Restatement or accounting adjustments
 - ▶ Correct or adjust test year income statement for misclassifications, errors, or restatements to regulatory accounting
- Reconciliation of GAAP or tax basis to regulatory basis
 - ▶ Small water companies may provide financials for rate-making purposes that are maintained by their tax accountant on a tax basis of accounting

Q. How do adjustments differ from restatements?

3.14 Rate-case adjustments (continued)

- Ratemaking policy adjustments - disallowances
 - ▶ Remove expenses classified as not belonging to the regulatory entity
 - ▶ Remove expenses that typically are not recoverable in rates
- Return attrition (or “erosion”)
 - ▶ Adjustment to counteract the tendency of utility returns to erode over time due to:
 - Inflationary pressures – operating costs are increasing faster than revenues
 - Aggressive infrastructure growth or replacement program – capital costs are increasing faster than recovery through the depreciation expense
- Demand attrition (or “suppression”)
 - ▶ Accounts for declining customer usage based on technical efficiency gains, economic conditions, and elasticity effects
- Caution about moving averages and directional trending
 - ▶ Trends can be volatile but stationary or non-stationary
 - ▶ For non-stationary trends, moving averages may not be accurate (Part 5)
 - ▶ Long-term trends can reverse direction (e.g., water usage)

3.14 Summary of adjustments ⓘ

Revenue-related

- General
 - ▶ Growth or conservation impacts
 - ▶ Weather
 - ▶ Annualize recent rate increases
 - ▶ Tracker revenues
 - ▶ Unbilled revenues
- Adjustments to customers by class
 - ▶ Economic forecasts
- Adjustments to customer usage by class
- End-use forecasting (various methods)
 - ▶ Attrition adjustments based on usage efficiency
- Weather normalization

Expense-related

- Staffing levels
- Position vacancies
- Payroll and pensions
- Benefits
- Incentive compensation

- Wage increases
- Employee counts
- Overtime

3.14 Adjustments in the COVID-19 context ⓘ

- COVID-19-related expenses and cost recovery
 - ▶ Personal protective equipment (PPE), sanitizing, technology for employee telework
 - ▶ Amortization of deferred expenses from prior period – creation of a regulatory asset
 - ▶ Attempted recovery of foregone revenues from sales or fees – including late fees
- Adjustments to revenues and expenses
 - ▶ Removal of non-recurring pandemic effects not expected to affect the rate year
- Challenge for cost allocation and rates
 - ▶ Divergence of actual costs and sales by class from models
 - ▶ Interclass allocation and potential cross-subsidies
 - ▶ Economic impact on business and households affecting ability to pay

3.14 Poll: ratemaking adjustments

- In reviewing a utility's independently audited expenses for normal operations, the regulatory auditor focuses on
 - A. Rechecking calculations on the utility's tax returns
 - B. Tracing each expense item to the general ledger
 - C. Contacting vendors to confirm invoice amounts
 - D. Normalizing expense changes for the test-year rates

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3.14 Exercise: payroll expense

Monthly payroll	Stated historical test-year expense: 5% increase effective in Nov.	Company expects another 6% increase effective in Nov.	Adjustment to historical test year	Restated expense for test year
Jan	\$400,000	\$420,000	\$20,000	\$420,000
Feb	\$400,000	\$420,000	\$20,000	\$420,000
Mar	\$400,000	\$420,000	\$20,000	\$420,000
Apr	\$400,000	\$420,000	\$20,000	\$420,000
May	\$400,000	\$420,000	\$20,000	\$420,000
Jun	\$400,000	\$420,000	\$20,000	\$420,000
Jul	\$400,000	\$420,000	\$20,000	\$420,000
Aug	\$400,000	\$420,000	\$20,000	\$420,000
Sep	\$400,000	\$420,000	\$	\$
Oct	\$400,000	\$420,000	\$	\$
Nov	\$420,000	\$445,000	\$	\$
Dec	\$420,000	\$445,000	\$	\$
Stated annualized expense	\$4,840,000	\$5,090,000	\$	\$

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Jun	\$400,000	\$420,000	\$20,000	\$420,000
Jul	\$400,000	\$420,000	\$20,000	\$420,000
Aug	\$400,000	\$420,000	\$20,000	\$420,000
Sep	\$400,000	\$420,000	\$20,000	\$420,000
Oct	\$400,000	\$420,000	\$20,000	\$420,000
Nov	\$420,000	\$445,000	\$ 0	\$420,000
Dec	\$420,000	\$445,000	\$ 0	\$420,000
Stated annualized expense	\$4,840,000	\$5,090,000	\$200,000	\$5,040,000

3.14 Exercise: insurance expense

Monthly payroll	Notes on insurance expense	Stated historical test-year expense	Adjustment to historical test year		Restated expense for test year
Jan	General, property, auto, & liability monthly premiums: \$12,000 Key personnel: \$3,000 Vandalism insurance cash payout in April: \$2,500 (restatement)	$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Feb		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Mar		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Apr		$\$12,000 + \$3,000 - \$2,500 = \$12,500$	(\$3,000)	\$2,500	\$12,000
May		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Jun		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Jul	General, property, auto, & liability premium will increase by 4% in July of rate year, as documented (known and measurable)	$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	?	?
Aug		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	?	?
Sep		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	?	?
Oct		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	?	?
Nov		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	?	?
Dec		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	?	?
Stated annualized expense		\$177,250	(\$36,000)	?	?

3.14 Exercise: insurance expense

Monthly payroll	Notes on insurance expense	Stated historical test-year expense	Adjustment to historical test year		Restated expense for test year
Jan	General, property, auto, & liability monthly premiums: \$12,000	$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Feb		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Mar		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Apr	Key personnel: \$3,000	$\$12,000 + \$3,000 - \$2,500 = \$12,500$	(\$3,000)	\$2,500	\$12,000
May	Vandalism insurance cash payout in April: \$2,500 (restatement)	$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Jun		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$0	\$12,000
Jul	General, property, auto, & liability premium will increase by 4% in July of rate year, as documented (known and measurable)	$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$480	\$12,480
Aug		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$480	\$12,480
Sep		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$480	\$12,480
Oct		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$480	\$12,480
Nov		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$480	\$12,480
Dec		$\$12,000 + \$3,000 = \$15,000$	(\$3,000)	\$480	\$12,480
Stated annualized expense		\$177,250	(\$36,000)	\$5,380	\$146,880

3.15 Ratemaking scenarios

1. A utility incurs lobbying expenses related to legislation specifying favorable ratemaking treatment of acquisitions; industry consolidation is a priority of the state and the commission.
2. A utility funds through association dues a national campaign to promote the "value of water" to the public and build support for rate increases needed for infrastructure investment.
3. A utility incurs substantial legal fees related to acquiring water rights that it claims are needed to provide service but is unsuccessful.
4. A utility is fined for environmental contamination caused by illegal dumping near a water supply source, about which it was unaware.
5. A utility files a rate case including a wage increase for employees, supported by a budget document.
6. A utility provides executive bonuses based on meeting profit goals in the form of equity shares in the company at a discounted rate, recoverable from rates.