

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

**VERIFIED PETITION OF THE BOARD OF)
DIRECTORS FOR UTILITIES OF THE)
DEPARTMENT OF PUBLIC UTILITIES OF THE CITY)
OF INDIANAPOLIS, D/B/A CITIZENS THERMAL,)
FOR (1) AUTHORITY TO ADJUST ITS RATES AND)
CHARGES FOR STEAM UTILITY SERVICE, (2))
APPROVAL OF A NEW SCHEDULE OF RATES AND)
CHARGES, AND (3) APPROVAL OF CERTAIN)
REVISIONS TO ITS TERMS AND CONDITIONS)
APPLICABLE TO STEAM UTILITY SERVICE)**

CAUSE NO. 45855

**VERIFIED DIRECT TESTIMONY
of
MITCHELL L. BILBE**

**On
Behalf of
Petitioner,
CITIZENS THERMAL**

Petitioner's Exhibit No. 6

INTRODUCTION AND BACKGROUND

Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A1. My name is Mitchell L. Bilbe. My business address is 9500 Arboretum Boulevard, Suite 200, Austin, Texas 78759.

Q2. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A2. I am employed by Rudd and Wisdom, Inc. I am a Consulting Actuary who specializes in retirement benefits, specifically Pension Plans and Other Post-Employment Benefits (OPEB) Plans. I am a Principal and Vice President of Rudd and Wisdom, Inc. where I have been employed since 2000.

Q3. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A3. I graduated from the University of Virginia with a Bachelor of Arts degree in Mathematics in 1995. I have been employed in the actuarial field since graduation. I became an Enrolled Actuary in 2000 and a Fellow of the Society of Actuaries in 2001, and I have also been a Member of the American Academy of Actuaries since 2000. During my career, I have been involved with every aspect of actuarial valuations for pension plans and OPEB plans. I am presently a lead consultant who supervises actuarial valuations for several pension plans and OPEB plans of both regulated and unregulated public and private companies. My responsibilities include plan design studies, actuarial projections, nondiscrimination testing, plan document drafting and administrative tasks. My responsibilities also include making presentations to clients of actuarial studies and valuations, the supervision of other actuaries, and the overall management of client relationships.

Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A4. The purpose of my testimony is to describe the actuarial funding methods that are used to determine the funding amounts for the Citizens Energy Group Retirement Plan (the "Retirement Plan") and the Citizens Energy Group Qualified Governmental Excess Benefit Arrangement (the "QGEBA"), and specifically the funding amounts allocable to Citizens Thermal under these plans. In addition, my testimony seeks to explain differences between the determination of Pension Expense under Generally Accepted Accounting Principles (GAAP) accounting and the determination of funding amounts in accordance with the employer's funding policy. Although my testimony does not address the Citizens Energy Group Postretirement Benefit Plan, my firm also provides actuarial services to this OPEB plan and we prepared the FASB ASC §715-20 and §715-60 valuation report for this plan for FY2022.

Q5. DOES CITIZENS THERMAL INCUR THE ENTIRETY OF THE PENSION EXPENSE AND COST OF FUNDING THE RETIREMENT PLAN AND QGEBA?

A5. No. The total Pension Expense and the total cost of funding the Retirement Plan and the QGEBA are allocated to each division of Citizens Energy Group (i.e., Shared Services, Gas, Manufacturing, Citizens Thermal (a.k.a. "Steam"), etc.) by first allocating each participant's liability to the division in which they presently work or worked prior to their termination of employment. Next, total plan assets are allocated to each division in proportion to the division's liability to the total plan liability. Once liabilities and assets

1 have been allocated to each division, the remaining Pension Expense and funding
2 contribution calculations can be determined for each division.¹

3 **Q6. ARE YOU SPONSORING ANY ATTACHMENTS IN THIS MATTER?**

4 A6. Yes. I am sponsoring the following three attachments in this matter:

- 5 • Petitioner's Exhibit No. 6, Attachment MLB-1, which is the Financial Accounting
6 Standards Board (FASB) Accounting Standards Codification (ASC) §715-20 and
7 §715-30 valuation report for the Retirement Plan. This report was prepared by my firm
8 for Citizens Energy Group and it computes the Pension Expense and Citizens Energy
9 Group's reporting and disclosure requirements for the Retirement Plan for fiscal year
10 (FY) 2022.
- 11 • Petitioner's Exhibit No. 6, Attachment MLB-2, which is a report prepared by my firm
12 for Citizens Energy Group that determines the pension funding requirement for the
13 Retirement Plan for the fiscal year beginning October 1, 2022.
- 14 • Petitioner's Exhibit No. 6, Attachment MLB-3, which is the FASB ASC §715-20 and
15 §715-30 valuation report for the QGEBA. This report was prepared by my firm for
16 Citizens Energy Group and it computes the Pension Expense and Citizens Energy
17 Group's reporting and disclosure requirements for the QGEBA for FY2022.

18 **Q7. WHAT TYPE OF PLAN IS THE CITIZENS ENERGY GROUP RETIREMENT**
19 **PLAN?**

20 A7. The Retirement Plan is a defined benefit pension plan that meets the tax-qualification
21 requirements under Internal Revenue Code (the Code) §401(a). The plan provides annual

¹ See Q/A Nos. 13, 18, 25 and 27 for additional details on the allocation of Pension Expense and Contributions.

1 retirement benefits based on a participant's years of service and an average of their annual
2 plan compensation at the time of retirement. Among the many requirements necessary to
3 meet the qualification rules of Code §401(a) is a requirement that the annual benefits
4 provided by a defined benefit pension plan not exceed the annual limit prescribed under
5 Code §415(b). The Retirement Plan has provisions which prevent plan benefits from
6 exceeding the limit under Code §415(b). Furthermore, the Retirement Plan is a
7 Governmental Plan because Citizens Energy Group meets the requirements of Code
8 §414(d) and is considered a Governmental employer under this section of the Code.

9 **Q8. WHAT TYPE OF PLAN IS THE CITIZENS ENERGY GROUP QGEBA?**

10 A8. The QGEBA is a defined benefit pension plan that provides benefits to participants in the
11 Retirement Plan if their Retirement Plan benefit is limited by Code §415(b). The benefit
12 provided by the QGEBA is equal to the excess of (a) over (b) where: (a) is the benefit that
13 would have been provided by the Retirement Plan had the Retirement Plan not been subject
14 to the Code §415(b) limit and (b) is the Retirement Plan benefit. In this manner, the
15 Retirement Plan benefit plus the QGEBA benefit is equal to the total benefit that would
16 have been provided by the Retirement Plan had such benefit not been subject to the Code
17 §415(b) limit. The QGEBA was established effective January 1, 2020 and is intended to
18 be and is operated as a "qualified governmental excess benefit arrangement" as such term
19 is defined under Code §415(m)(3).

20 **Q9. IN A GIVEN YEAR, IS THE AMOUNT OF CITIZENS ENERGY GROUP'S**
21 **PENSION EXPENSE REPORTED ON ITS ANNUAL FINANCIAL STATEMENT**
22 **EQUAL TO THE CONTRIBUTIONS THE COMPANY MAKES TO THE**
23 **RETIREMENT PLAN AND THE QGEBA?**

1 A9. No. The Financial Accounting Standards Board (FASB) promulgates the accounting rules,
2 including the determination of Pension Expense, for defined benefit pension plans under
3 FASB Accounting Standards Codification (ASC) §715-30, where such accounting rules
4 are compliant with GAAP². The annual funding contribution for the Retirement Plan is
5 determined in accordance with the Retirement Plan's Funding Policy³.

6 **Q10. HOW IS THE ANNUAL PENSION EXPENSE DETERMINED UNDER FASB ASC**
7 **§715-30?**

8 A10. Under ASC §715-30, the liability associated with a pension plan's expected future benefit
9 payments is called the Projected Benefit Obligation (PBO). The annual pension expense
10 is equal to: (a) the expected growth in PBO during the fiscal year due to service and interest
11 accruals, plus (b) an amortization over expected future working years of the active plan
12 participants of both the change in the PBO due to actuarial gains/losses and the change in
13 the PBO due to plan amendments, reduced by (c) the expected return on Plan Assets during
14 the fiscal year. ASC §715-30 mandates the use of certain actuarial assumptions and
15 methods in the determination of the PBO. For example, the discount rate (i.e., the interest
16 rate used to discount future expected plan benefits in the determination of the plan liability)
17 is based on high-grade corporate bond rates in effect at the beginning of each fiscal year.
18 Thus, the discount rate is marked-to-market rates each year. Additionally, ASC §715-30
19 requires that the PBO be determined using the Projected Unit Credit (PUC) funding method
20 which only uses service accrued as of the valuation date but projects pay increases through
21 expected retirement age. FASB mandates certain assumptions and methods so that

² See Q/A No. 10 for additional details on the determination of Pension Expense.

³ See Q/A No. 11 for additional details on the determination of the Retirement Plan's annual funding contribution.

1 liabilities are computed on a consistent basis across all companies and users of company
2 financial statements can compare different companies' liabilities.

3 **Q11. HOW IS THE ANNUAL EMPLOYER CONTRIBUTION DETERMINED FOR**
4 **THE RETIREMENT PLAN?**

5 A11. The Retirement Plan annual employer contribution is determined in accordance with the
6 Retirement Plan's Funding Policy. The Funding Policy stipulates that certain actuarial
7 assumptions⁴ and methods must be used to determine the plan's funding liability, and it
8 stipulates how the contribution should be determined based on this specific measure of the
9 liability. The funding method used to determine the annual employer contribution for the
10 Retirement Plan is the Frozen Initial Liability (FIL) Funding Method. There are two
11 primary components to the annual contribution determined under this funding method. The
12 first component is the amortization of the Unfunded Accrued Liability (UAL), where the
13 UAL is equal to the Accrued Liability (AL) determined under the Entry Age Normal
14 funding method reduced by the Market Value of Assets (MVA) held in the pension trust
15 (i.e., the UAL is equal to the AL minus the MVA). The amount of the UAL is amortized
16 over a fixed period of time, not to exceed 15 years, for purposes of the funding
17 computation. The second component of this funding method is the Normal Cost. The
18 Normal Cost is equal to (a) the Present Value of Future Benefits (PVFB) reduced by the
19 sum of the MVA and the UAL with such result amortized over (b) the expected future
20 working lifetime of active plan participants as a level percentage of expected salary. This
21 Normal Cost plus the amortization payment on the UAL, with interest thereon, determines

⁴ See Q/A No. 20 for additional details on the interest rate assumptions used in the Retirement Plan funding valuation.

1 the amount of the funding needed for the prospective plan year. The annual funding
2 contribution determined under the FIL funding method is intended to provide consistent
3 and systematic levels of contributions which fund a portion of plan liabilities over the
4 future expected careers of active participants in the Retirement Plan and the unfunded
5 liabilities over a period not to exceed 15 years.

6 **Q12. WHAT IS AN ACCRUED OR PREPAID PENSION EXPENSE?**

7 A12. Prior to 2007, the pension liability reported on an employer's balance sheet was called the
8 (Accrued)/Prepaid Pension Expense. The (Accrued)/Prepaid Pension Expense is equal to
9 the running total of the difference between employer contributions and FASB pension
10 expense over all years from the inception of the pension accounting rules to the applicable
11 accounting reporting date. If the sum of the employer contributions to the pension plan
12 over these years exceeds the sum of the annual FASB pension expenses over the same
13 period, then the plan has a Prepaid Pension Expense. If the sum of the employer
14 contributions to the pension plan over these years is less than the sum of the annual FASB
15 pension expenses over the same period, then the plan has an Accrued Pension Expense.
16 Effective in 2007 the FASB reporting rules were changed, and the (Accrued)/Prepaid
17 Pension Expense is no longer reported by an employer on its balance sheet. Instead, the
18 liability reported on an employer's balance sheet under FASB ASC §715-20 is the Funded
19 Status of the plan (i.e., the difference between the plan's PBO and plan assets).
20 Furthermore, the employer must also report in Accumulated Other Comprehensive Income
21 (AOCI) the portion of the balance sheet liability that has yet to be expensed. The sum of a
22 pension plan's Funded Status and AOCI is equal to the liability previously reported as the
23 (Accrued)/Prepaid Pension Expense. For example, the Funded Status and the AOCI of the

1 Retirement Plan as of September 30, 2022 are shown as \$10,827,551 in item 3. and
2 \$34,998,067 in item 5.d. on page IV-2 of the report included as Petitioner's Attachment
3 MLB-1. The sum of these two items is equal to \$45,825,618 and is the Prepaid Pension
4 Expense for the Retirement Plan as of September 30, 2022. The total Pension Expense for
5 the Retirement Plan for FY2022 is \$10,493,591 as shown in item 7.g. on page IV-3 of
6 Attachment MLB-1.

7 **Q13. OF THE FOREGOING AMOUNT, HOW MUCH OF THE (ACCRUED)/PREPAID**
8 **PENSION EXPENSE AND THE PENSION EXPENSE UNDER THE**
9 **RETIREMENT PLAN IS ASSIGNED TO CITIZENS THERMAL?**

10 A13. For purposes of allocating FASB ASC 715 amounts to each division of Citizens Energy
11 Group, the liabilities (i.e., the PBO and the Service Cost) are determined for each
12 participant in the Retirement Plan, and then each participant's PBO and Service Cost are
13 assigned to the division in which the participant works or worked prior to termination of
14 employment. Plan Assets are allocated to each division based on the division's PBO in
15 proportion to the total Retirement Plan PBO. Once these amounts have been allocated, the
16 remaining calculations of the division's Pension Expense and (Accrued)/Prepaid Pension
17 Expense can be determined. Citizens Thermal's portion of the Funded Status and the AOCI
18 of the Retirement Plan as of September 30, 2022 are shown as \$746,936 in item 3. and
19 \$(2,004,090) in item 5.d., respectively, on page Appendix – D1 of Attachment MLB-1.
20 The sum of these two items is equal to \$(1,257,154) and is the Accrued Pension Expense
21 for Citizens Thermal as of September 30, 2022. The FY2022 Pension Expense that is
22 allocated to Citizens Thermal is \$536,636 as shown in item 7.g. on page Appendix D-2 of
23 Attachment MLB-1. As discussed by Petitioner's witness Sabine Karner, the Pension

Expense allocated to Citizens Thermal includes a portion of the Pension Expense allocated to the Shared Services division. Ms. Karner supports the allocation methodology used to assign the Shared Services Pension Expense of the Retirement Plan to Citizens Thermal.

Q14. WHY IS THERE AN ANNUAL CONTRIBUTION TO THE RETIREMENT PLAN IF THE RETIREMENT PLAN HAS A PREPAID PENSION EXPENSE?

A14. The incidence of Pension Expense differs from the incidence of employer contributions⁵. Even when the FASB measure of the plan's Funded Status is in an overfunded position and the plan has a Prepaid Pension Expense, it is possible for the plan to have an Unfunded Accrued Liability (UAL) as measured for funding purposes. As previously discussed, the measure of the liability for the Retirement Plan differs under FASB and under the Funding Policy due to differences between the actuarial assumptions and methods. The Retirement Plan's PBO (i.e., the FASB liability) measured as of September 30, 2022 is \$356,208,419 as shown in item 1.g. on page IV-2 of the report included as Petitioner's Attachment MLB-1. However, the measure of the Retirement Plan's accrued liability as of October 1, 2022 (i.e., one day later) is \$467,863,414 as shown in item 4. on page III-1 of the report included as Petitioner's Attachment MLB-2. (The difference between these two measures of the plan liability is due to the underlying actuarial assumptions and methods used in each valuation and not due to the one-day difference in the valuation dates.) The Market Value of Assets as of this measurement date is \$367,035,970 as shown in line 2.e. on page IV-2 of the report included as Petitioner's Attachment MLB-1 and also shown in item 5. on page III-1 of the report included as Petitioner's Attachment MLB-2. As such, the FASB Funded

⁵ See Q/A Nos. 10 and 11 for additional details on the determination of Pension Expense and employer contributions.

1 Status (i.e., the Market Value of Assets minus the PBO) is \$10,827,551 (i.e., \$367,035,970
2 minus \$356,208,419) which illustrates an overfunded plan on this measurement basis.
3 However, the UAL (i.e., the AL minus the Market Value of Assets) as measured on a
4 funding basis is \$100,827,444 (i.e., \$467,863,414 minus \$367,035,970) which illustrates
5 an underfunded plan on this measurement basis. Part of the difference between the liability
6 measurements is attributable to the interest rates used to discount the future expected plan
7 benefits for FASB and funding liability measures, where FASB is presently using a higher
8 effective interest rate of 5.15% compared to the funding effective interest rate of 3.48%.⁶
9 Also, part of this difference is attributable to the difference between the FASB Projected
10 Unit Credit funding method and the Frozen Initial Liability funding method used to
11 determine plan contributions.

12 **Q15. DOES AN UNFUNDED ACCRUED LIABILITY INDICATE THAT A PLAN MAY**
13 **NOT HAVE THE ABILITY TO MEET ITS FUNDING OBLIGATIONS?**

14 A15. No. The UAL indicates that plan assets are less than the plan liabilities as of a specific
15 measurement date. The existence of a UAL alone does not indicate that future investment
16 returns on plan assets plus future employer contributions will be insufficient to fully fund
17 the Retirement Plan benefits and pay all current and future obligations of the plan. The
18 development of the UAL and the Normal Cost under the FIL funding method provides for
19 a systematic method to fund current and future obligations over a reasonable period. It is
20 routine for a retirement plan to have an UAL, and the existence of a UAL is a required
21 component of the FIL Funding Method⁷, until a plan becomes fully funded.

⁶ See Q/A No. 20 for additional details on the interest rate assumptions.

⁷ See Q/A No. 11 for additional details on the FIL Funding Method.

1 **Q16. IS THE OVERALL GOAL OF THE PENSION FUNDING METHOD TO CREATE**
2 **A TRUST BALANCE THAT COMPLETELY FUNDS THE RETIREMENT PLAN**
3 **SPONSORED BY CITIZENS ENERGY GROUP AND ITS VARIOUS DIVISIONS?**

4 A16. No. The overall goal of the funding method for the Citizens Energy Group Retirement
5 Plan is to provide systematic annual funding so that the plan will meet both current
6 obligations to retirees and be prepared to meet the future obligations of future retirees. The
7 object is not to immediately fully fund all future obligations of the plan, but rather to fund
8 the UAL over a period not to exceed 15 years and to fund Normal Cost accruals over the
9 employees' future expected careers. This funding method is designed to keep the plan
10 actuarially sound so that future obligations are met over the lifetime of the plan, and this is
11 an actuarially reasonable funding method.

12 **Q17. PLEASE DESCRIBE PETITIONER'S ATTACHMENT MLB-2.**

13 A17. Attachment MLB-2 shows the Retirement Plan's Entry Age Normal Accrued Liability in
14 the amount of \$467,863,414. The Market Value of Assets of \$367,035,970 is subtracted
15 from the Entry Age Normal Accrued Liability to determine the UAL of \$100,827,444. The
16 UAL is amortized (with interest) over fifteen (15) years as a component of the contribution
17 to the plan. Next, the Present Value of Future Benefits (PVFB) is determined as a
18 component of the calculation of the Frozen Initial Liability Normal Cost. The Market Value
19 of Assets (since that is the amount funded to date) and the UAL (since this amount will be
20 amortized over fifteen (15) years) are subtracted from the PVFB to determine the remaining
21 value of benefits to be funded. This amount is the Present Value of Future Normal Cost
22 (PVFNC). Because the benefits to be paid from the Retirement Plan are salary related, the
23 PVFNC is funded over the future working lifetime of plan participants relative to salary.

1 This is accomplished by dividing the PVFNC by the Present Value of Future Salaries to
2 determine a Normal Cost Percentage (NCP). The NCP multiplied by the expected salaries
3 in the year of the valuation yields the Normal Cost under the Frozen Initial Liability
4 Funding Method. To complete the funding calculation, the Normal Cost of \$13,251,844 is
5 added to the 15-year amortization of the UAL of \$8,447,915 to get the amount of the plan
6 contribution, without interest. Routinely, interest for one year (i.e., \$755,152 in FY2022),
7 is added in recognition of the fact that the contribution is made incrementally rather than
8 in a lump sum at the beginning of the fiscal year. The total contribution of \$22,454,911 is
9 shown in item 11.e. on page III-1 of the report included as Petitioner's Attachment MLB-
10 2.

11 **Q18. OF THE FOREGOING AMOUNT, HOW MUCH OF TOTAL CONTRIBUTION IS**
12 **ALLOCATED TO CITIZENS THERMAL?**

13 A18. For purposes of allocating contribution amounts to each division of Citizens Energy Group,
14 the liabilities (i.e., the PVFB and the Entry Age Normal Accrued Liability) are determined
15 for each participant in the Retirement Plan and then each participant's PVFB and Entry
16 Age Normal Accrued Liability are assigned to the division in which the participant works
17 or worked prior to their termination of employment. Plan Assets are allocated to each
18 division based on the division's Entry Age Normal Accrued Liability in proportion to the
19 total Entry Age Normal Accrued Liability for the Retirement Plan. Once these amounts
20 have been allocated, the remaining calculations of the division's contribution can be
21 determined. The allocation of the foregoing total among the various divisions within
22 Citizens Energy Group also is shown on Petitioner's Attachment MLB-2 on page II-1 with
23 additional calculation details on page III-2. The amount of total contribution allocated to

1 Citizens Thermal is \$1,351,229 as shown in the column labeled "Steam" on the
2 aforementioned pages of Petitioner's Attachment MLB-2. This amount does not include
3 the portion of the contribution allocated to the Shared Services division that is also
4 attributed to Citizens Thermal, as discussed by Petitioner's witness Sabine Karner. Ms.
5 Karner supports the allocation methodology used to assign the Shared Services
6 contribution to Citizens Thermal.

7 **Q19. WHY WOULD THE ENTRY AGE NORMAL ACCRUED LIABILITY INCREASE**
8 **FROM ONE YEAR TO THE NEXT?**

9 A19. The Entry Age Normal (EAN) Accrued Liability is the portion of the Present Value of
10 Future Benefits (PVFB) attributable to past service. The EAN Normal Cost is the portion
11 of the PVFB expected to be accrued by active employees in the year of the valuation. If
12 the same actuarial assumptions are used in two successive valuations, then the EAN
13 Accrued Liability will increase from one year to the next by (a) Normal Cost due to
14 additional benefits earned by active participants and (b) Interest on the beginning of year
15 EAN Accrued Liability because the period for discounting the value of future benefits
16 decreases by one year. The EAN Accrued Liability will decrease from one year to the next
17 by the amount of benefits paid to retirees and beneficiaries. Provided that the sum of the
18 Interest on the Accrued Liability and the Normal Cost exceeds the amount of the benefits
19 paid, the EAN Accrued Liability will increase from one year to the next. Given the current
20 plan demographics and assuming no assumptions are changed between successive
21 valuations, the Retirement Plan's EAN Accrued Liability presently will increase each year
22 because the sum of the Interest and Normal Cost exceeds the benefit payments. However,
23 because the interest rate assumption that is used to discount the expected plan benefit

1 payments to determine PVFB is based on an average of market rates for corporate bonds
2 during the 24 months preceding each valuation date, the interest rate assumption changes
3 each year. The effective interest rate used for the October 1, 2021 valuation was 3.10%,
4 and the effective interest rate used for the October 1, 2022 valuation was 3.48%. Higher
5 interest rates produce lower PVFBs and lower associated EAN Accrued Liabilities and
6 Normal Costs. As such, the EAN Accrued Liability decreased from October 1, 2021 to
7 October 1, 2022 because the increase in the interest rate from 3.10% to 3.48% had a larger
8 effect on reducing the EAN Accrued Liability than the growth in the liability due to Interest
9 and Normal Cost accruals offset by benefits paid. See item 4. on page III-1 of the report
10 included as Petitioner's Attachment MLB-2 for an illustration of the EAN Accrued
11 Liability in each of the last two valuations.

12 **Q20. HOW DO THE INTEREST RATES USED IN THE VALUATION PROCESS**
13 **AFFECT THE RETIREMENT PLAN'S ANNUAL FUNDING REQUIREMENT?**

14 A20. The interest rates affect the computations of the Entry Age Normal Accrued Liability (AL),
15 the Present Value of Future Benefits (PVFB) and the Present Value of Future Salaries
16 (PVFS). Because all three computations are present value measurements, the higher the
17 interest rates, the lower the resultant present values. The Pension Protection Act of 2006
18 (PPA) and associated Internal Revenue Service (IRS) and ERISA regulations establish
19 interest rates, which must be used for funding valuations of private-sector pension plans
20 subject to ERISA. These interest rates are based on an average of high-grade corporate
21 bond rates over a 24-month period preceding the valuation date. These interest rates are
22 calculated and published by the IRS. While these interest rates are not required to be
23 applied to the funding calculations for a Governmental Plan, the Funding Policy for this

1 plan uses these rates in order to reflect the current economic environment while using the
2 24-month averaging period as a smoothing mechanism in order to reduce contribution
3 volatility from one year to the next. These PPA interest rates were used in the recent
4 valuation study performed for Citizens Energy Group, which is identified as Petitioner's
5 Attachment MLB-2. Over the last few years, the interest rates have experienced both
6 decreases and increases. The single equivalent interest rates have been 4.17%, 3.65%,
7 3.10% and 3.48% for the October 1, 2019, 2020, 2021 and 2022 valuations, respectively.
8 In contrast FASB uses a mark-to-market approach (i.e., no averaging period) in
9 determining the interest rates. In the last four years, the FASB effective interest rates for
10 the Retirement Plan have been 3.01%, 2.45%, 2.73% and 5.15% as of September 30, 2019,
11 2020, 2021 and 2022, respectively. Were a mark-to-market approach to be used for
12 funding purposes, then contributions would fluctuate with more volatility without
13 providing any appreciable benefit towards the long-term funding of plan. Instead, the 24-
14 month interest rate smoothing provides a more stable contribution pattern without
15 sacrificing the effects of incorporating recent economic trends.

16 **Q21. WHY DID CITIZENS ENERGY GROUP SELECT 15 YEARS AS THE**
17 **AMORTIZATION PERIOD FOR THE UNFUNDED ACCRUED LIABILITY IN**
18 **THE RETIREMENT PLAN?**

19 A21. Under the PPA, amortization periods for the UAL were routinely seven years, but the
20 American Rescue Plan Act of 2021 (ARPA) increased this amortization period to fifteen
21 years. As a Governmental Plan, Citizens Energy Group is neither subject to the PPA nor
22 ARPA. However, the Funding Policy for the Retirement Plan utilizes 15 years for the
23 amortization period which is consistent with the PPA as amended by ARPA. Furthermore,

1 a 15-year period is actuarially sound; and because Citizens Energy Group provides utility
2 services and is not like many other corporations which could quickly close operations if
3 adverse financial circumstances were to arise, Citizens Energy Group is likely to be able
4 to continue to make contributions over a period a several years even in the event of
5 sustained adverse financial circumstances. In addition, the Conference of Consulting
6 Actuaries Public Plans Community published a report in October 2014 entitled "Actuarial
7 Funding Policies and Practices for Public Pension Plans". This publication is a "white
8 paper" that develops principal elements and parameters of actuarial funding policy for U.S.
9 public pension plans. The guidance offered in the white paper "is not intended to supplant
10 or replace the applicable Actuarial Standards of Practice (ASOPs)" and is "nonbinding and
11 advisory only", but it is intended as advice to actuaries and retirement boards in setting
12 funding policy. The white paper develops a Level Cost Allocation Model that recommends
13 actuarial funding methods for measuring both plan liabilities and plan assets, as well as
14 recommends amortization periods for funding the UAL. The 15-year amortization period
15 used by the Funding Policy meets the recommended standards in this white paper.
16 Consequently, in my professional actuarial opinion, a 15-year amortization period for the
17 UAL is reasonable for the Citizens Energy Group Retirement Plan in order to keep the plan
18 actuarially sound.

19 **Q22. HAVE YOU MADE ANY CHANGES IN THE FUNDING METHOD FOR THE**
20 **CITIZENS ENERGY GROUP RETIREMENT PLAN SINCE CITIZENS**
21 **THERMAL'S LAST RATE CASE (CAUSE NO. 44781; ORDER DATED**
22 **NOVEMBER 22, 2016)?**

1 A22. No. I have not made any changes to the funding methodology. The actuarial funding
2 method (Frozen Initial Liability Method), the source of the interest rates (i.e., the IRS
3 Notice published in the month of October containing the valuation date of the funding
4 study) and the fifteen-year amortization period for the UAL are consistent with what
5 Citizens Thermal used in Cause No. 44781. This methodology is consistent with the
6 funding study that determined the retirement plan funding during FY2022.

7 **Q23. IS A PARTICULAR ACTUARIAL FUNDING METHOD USED TO DETERMINE**
8 **THE FUNDING AMOUNTS FOR THE CITIZENS ENERGY GROUP QGEBA⁸?**

9 A23. No actuarial funding method is used to determine the annual contribution to the QGEBA.
10 Instead, the employer makes contributions to the QGEBA each year in an amount equal to
11 the benefits that are paid from the QGEBA each year. This funding approach is known as
12 the pay-as-you-go or “paygo” method.

13 **Q24. IS THE OVERALL GOAL OF THE QGEBA FUNDING METHOD TO CREATE**
14 **A TRUST BALANCE THAT COMPLETELY FUNDS THE QGEBA SPONSORED**
15 **BY CITIZENS ENERGY GROUP AND ITS VARIOUS DIVISIONS?**

16 A24. No. Given that the total liability of the QGEBA is roughly \$2.7M as of September 30,
17 2022 which is less than 1% of the Retirement Plan's obligations and an even smaller
18 percentage of the Citizens Energy Group's overall balance sheet liabilities, and given that
19 the amount of annual benefits paid to the retirees in the QGEBA was roughly \$218,000 in
20 FY2022, Citizens Energy Group has decided not to prefund the QGEBA liabilities and
21 instead operates on a pay-as-you-go-basis. Other than the current participants in the

⁸ See Q/A No. 8 for a description of the QGEBA.

1 QGEBA, no other Retirement Plan participants are expected to accrue benefits in excess
2 of the Code §415(b) limit. Thus, the QGEBA plan population is not expected to grow and
3 rather should diminish over time.

4 **Q25. PLEASE EXPLAIN THE DETERMINATION OF PLAN CONTRIBUTIONS BY**
5 **DIVISION FOR THE RETIREMENT PLAN WHICH APPEARS ON**
6 **ATTACHMENT MLB-2.**

7 A25. Page III-2 of Attachment MLB-2 shows the determination of the Normal Cost,
8 amortization payment and total contribution for each division of Citizens Energy Group.
9 The Entry Age Normal Accrued Liability (AL) is determined for each of the divisions, and
10 plan assets are assigned to each division based on the division's proportion of AL to the
11 total AL for Citizens Energy Group. We then calculate the UAL and the 15-year
12 amortization of the UAL. We use the Normal Cost percentage determined for the plan in
13 total and the salaries by division to allocate the Normal Cost by division. The Normal Cost
14 and amortization payment for each division is then used to calculate the amount of the
15 contribution for the division.

16 **Q26. PLEASE EXPLAIN THE DETERMINATION OF PLAN CONTRIBUTIONS BY**
17 **DIVISION FOR THE QGEBA WHICH APPEARS ON ATTACHMENT MLB-3.**

18 A26. This is a pay-as-you-go unfunded plan where each division's contribution is equal to the
19 benefits paid for participants in that division for the fiscal year. The total QGEBA
20 contribution for FY2022 is \$217,518 as shown in item 2.c. on page IV-2 of Petitioner's
21 Attachment MLB-3. In Attachment MLB-3, see items 2.c. and 2.d. for the contributions
22 and benefit payments for each division with participants in the QGEBA on page A-1 of

1 Appendix A for the Shared Services division, page B-1 of Appendix B for the Gas division
2 and page C-1 of Appendix C for the Water Division.

3 **Q27. HOW MUCH OF THE QGEBA PLAN CONTRIBUTIONS IS ALLOCATED TO**
4 **CITIZENS THERMAL?**

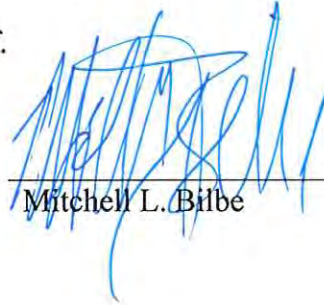
5 A27. Note that Citizens Thermal does not have any participants in the QGEBA so there is no
6 direct allocation of QGEBA costs to Citizens Thermal, and thus there is no Appendix in
7 Petitioner's Attachment MLB-3 related to Citizens Thermal. However, as supported by
8 Petitioner's witness Sabine Karner, a portion of the amount of the QGEBA liability of
9 Shared Services is allocated to Citizens Thermal. Ms. Karner supports the allocation
10 methodology used to assign the Shared Services contribution to Citizens Thermal.

11 **Q28. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?**

12 A28. Yes.

VERIFICATION

The undersigned affirms under the penalties for perjury that the foregoing testimony is true to the best of his knowledge, information and belief.

A handwritten signature in blue ink, appearing to read "Mitchell L. Bilbe", is written over a horizontal line. The signature is stylized with large, sweeping loops and a prominent initial "M".

Mitchell L. Bilbe

FINANCIAL ACCOUNTING STANDARDS BOARD

ASC 715-20 AND 715-30

DISCLOSURE FOR FISCAL YEAR ENDING SEPTEMBER 30, 2022

AND

EXPENSE FOR FISCAL YEAR ENDING SEPTEMBER 30, 2023



Rudd and Wisdom, Inc.

CONSULTING ACTUARIES

Mitchell L. Bilbe, F.S.A.
Evan L. Dial, F.S.A.
Philip S. Dial, F.S.A.
Charles V. Faerber, F.S.A., A.C.A.S.
Mark R. Fenlaw, F.S.A.
Brandon L. Fuller, F.S.A.
Shannon R. Hatfield, F.S.A.

Christopher S. Johnson, F.S.A.
Oliver B. Kiel, F.S.A.
Dustin J. Kim, F.S.A.
Edward A. Mire, F.S.A.
Rebecca B. Morris, A.S.A.
Amanda L. Murphy, F.S.A.

Michael J. Muth, F.S.A.
Khiem Ngo, F.S.A., A.C.A.S.
Timothy B. Seifert, F.S.A.
Chelsea E. Stewart, F.S.A.
Raymond W. Tilotta
Ronald W. Tobleman, F.S.A.
David G. Wilkes, F.S.A.

October 28, 2022

PERSONAL AND CONFIDENTIAL

Mr. Phil Zbojniewicz
Director of Accounting Services
Citizens Energy Group
2020 North Meridian Street
Indianapolis, Indiana 46202

Re: Application of FASB ASC 715-20 and
715-30 to the 2021-2022 and 2022-2023
Fiscal Years

Dear Phil:

Enclosed is our Accounting Requirements Actuarial Valuation of the Citizens Energy Group Retirement Plan as of September 30, 2022. The purpose of this valuation is to provide the employer and its auditors with the pension cost information and certain year-end accounting and disclosure requirements in accordance with Financial Accounting Standards Board Accounting Standards Codification (FASB ASC) 715-20 and 715-30, which together establish the accounting and disclosure requirements for pension plans. The results of this valuation are appropriate for these purposes only. The guidelines for determining an appropriate level of funding (contribution) for the year may be found in our separate Actuarial Valuation report.

The expense results for the 2021-2022 fiscal year are identical to our prior year FASB ASC 715-20 and 715-30 report dated October 29, 2021.

Note: This report may be provided to third parties only if distributed in its entirety.

Background

FASB ASC 715-20 and 715-30 together establish the standards of financial reporting and accounting for an employer that offers pension benefits to its employees. These standards include provisions for a liability or asset related to the pension plan to be shown directly on the employer's financial statements. Also, the pension expense shown on the financial statements may vary from the actual contribution. This report will provide you and your auditor with the information required by these accounting standards.

Net Periodic Pension Cost

Net Periodic Pension Cost (NPPC) is the accrual expense/(income) entry on the income statement for plan benefits. This amount is determined separately from employer contribution requirements and is \$10,493,591 for 2021-2022.

For the 2022-2023 fiscal year, the NPPC is expected to be \$11,250,635. The actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

Contents of this Report

In addition to the development of the Net Periodic Pension Cost (NPPC), this report also includes certain information to be disclosed in your company financial statement. The Table of Contents following this cover letter contains a complete list of all sections of the report. However, several key sections are described below:

- Management Summary – (Section II):
 - A Summary of NPPC, Accounting Liabilities and Assets
 - Participant Demographics
 - A Discussion of Other Topics for Management’s Review
- Net Periodic Pension Cost – (Section III):
 - NPPC for the 2021-2022 Fiscal Year
 - NPPC for the 2022-2023 Fiscal Year
 - Estimated Funded Status for 2022-2023 Interim Period Statements of Financial Position
- Disclosure as of September 30, 2022 – (Section IV)
- Summary of Assets – (Section VI)
- Glossary – (Section X)
- Disclosure and Expense Results by Division – (Appendix)

Action Items

The following list contains certain action items for company management:

1. Review the Management Summary (Section II) of this report.
2. Include the required information in Section IV in your company financial statement.
3. Notify us of any activities during the remainder of the 2022-2023 fiscal year that would lead to a mid-year remeasurement (e.g., a plan amendment, a curtailment or a settlement).
4. If the plan’s investment policy differs from the information in Section IV.B. of this report, replace that information prior to inclusion in the employer’s September 30, 2022 financial statements and provide Rudd and Wisdom with a copy of the plan’s actual investment policy. In addition, for purposes of financial statement disclosure, review the requirements under FASB ASC 715-20 for the disclosure of fair value measurements of plan assets (e.g., Level 1, Level 2 or Level 3 assets) and take the necessary measures to obtain any additional or different information in accordance with FASB ASC 715-20.

5. Make adjustments to the plan's 2022-2023 interim period funded status following the illustrative adjustments shown on page III-4.

Variability in Future Actuarial Measurement

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

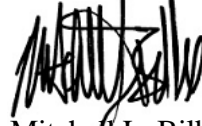
- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and
- Changes in plan provisions, applicable law or accounting standards.

We have not been asked to perform and have not performed any stochastic or deterministic sensitivity analyses of the potential ranges of such future measurements. If you have an interest in the results of any such analysis, please let us know.

If you have any questions concerning this information, please do not hesitate to call or write.

Respectfully submitted,

RUDD AND WISDOM, INC.



Mitchell L. Bilbe, F.S.A.



Christopher S. Johnson, F.S.A.

MLB/CSJ:nm

Enclosures

cc: Adrienne Bowers
Russ Clemens
Craig Jackson
Camela Johnson
Sabine Karner
Jodi Whitney

FASB ASC 715-20 AND 715-30

ACTUARIAL VALUATION

AS OF

SEPTEMBER 30, 2022

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Section I - Certification of FASB ASC 715-20 and 715-30 Actuarial Valuation as of September 30, 2022

At the request of Citizens Energy Group, we have performed an actuarial valuation of the plan as of September 30, 2022 under FASB ASC 715-20 and 715-30. The purpose of this report is to present the results of our valuation providing the information necessary to determine financial statement entries consistent with the accounting standards codification for the fiscal year ending September 30, 2022 and to determine expense entries for 2022-2023.

Actuarial computations under FASB ASC 715-20 and 715-30 are for purposes of fulfilling certain employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan. (See separate funding report.)

We have based our valuation on employee data as of September 30, 2022 (excluding new active participants between January 1, 2022 and September 30, 2022 and including as active participants those who terminated non-vested between January 1, 2022 and September 30, 2022) provided by Ms. Adrienne Bowers and asset information as of September 30, 2022 provided by Principal. We have used the actuarial methods and assumptions described in Section VII of this report. The actuarial valuation has been performed on the basis of the plan benefits described in Section VIII. Liabilities have been determined as of the measurement date (September 30, 2022) consistent with procedures described in FASB ASC 715-20 and 715-30.

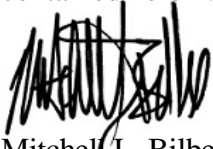
To the best of our knowledge, all current employees eligible to participate in the plan as of the valuation date and all other individuals who have a remaining vested benefit under the plan have been included in the valuation. Further, to the best of our knowledge all plan benefits have been considered in the development of plan costs.

The plan sponsor remains solely responsible for the accuracy and comprehensiveness of the data provided. However, to the best of our knowledge, no material biases exist with respect to any imperfections in the data provided by these sources. To the extent that any data imperfections existed in the historical compensation database, we have addressed the imperfections by application of the increase assumptions specified in Section VII. To the extent any imperfections exist in service records we have relied on best estimates provided by the employer. We have not audited the data provided, but have reviewed it for reasonableness and consistency relative to previously provided information. We have utilized software licensed from Winklevoss Technologies, LLC in the development of the liabilities summarized in the report.

To the best of our knowledge, the actuarial information supplied in this report is complete and accurate. The discount rates used for the calculation of the net periodic pension cost and for measuring liabilities as of the measurement date are those rates which have been determined consistent with the methodology prescribed under FASB ASC 715-30-35-44 for that purpose. Each other assumption is selected by the plan sponsor, subject to our advice. In our opinion, each of these assumptions is reasonably related to the experience of the plan and to reasonable expectations and is reasonable for the purpose of these measurements with respect to that individual assumption. We are neither aware

of any material inconsistencies among the assumptions, nor are we aware of any unreasonable results caused by the aggregation of the assumptions.

We hereby certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

A handwritten signature in black ink, appearing to read "Mitchell L. Bilbe".

Mitchell L. Bilbe, F.S.A.
Member of American Academy of Actuaries

A handwritten signature in black ink, appearing to read "Christopher S. Johnson".

Christopher S. Johnson, F.S.A.
Member of American Academy of Actuaries

A handwritten signature in black ink, appearing to read "Brandon L. Fuller".

Brandon L. Fuller, F.S.A.
Member of American Academy of Actuaries

Section II – Management Summary

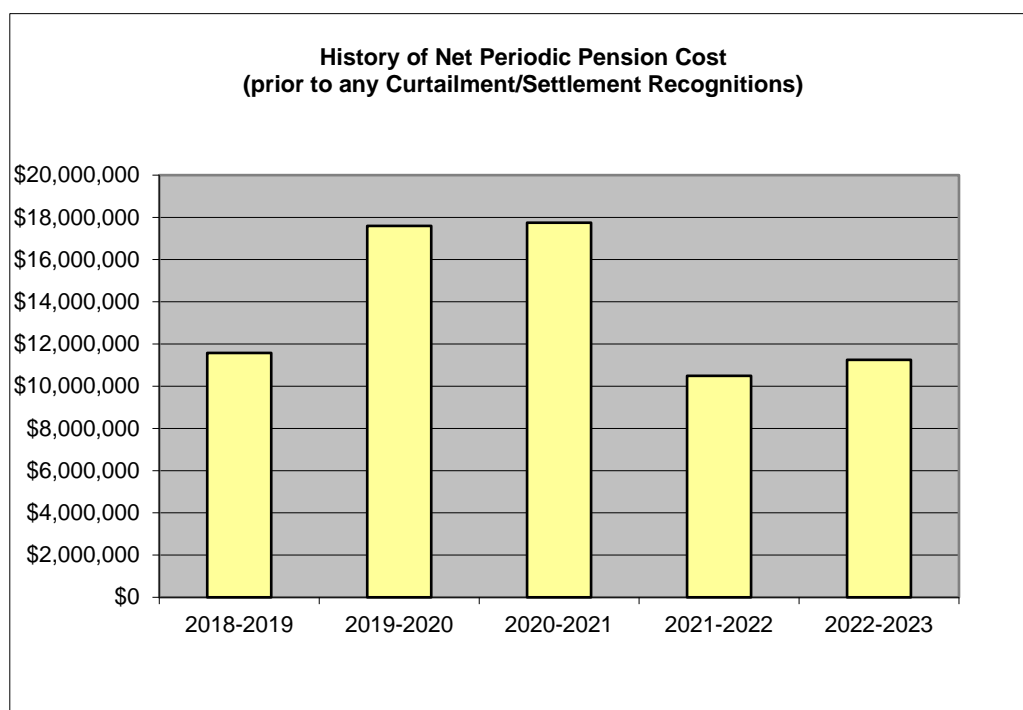
All employer liabilities presented throughout this report have been determined based upon the actuarial methods and assumptions outlined in Section VII and the plan provisions outlined in Section VIII.

A. Net Periodic Pension Cost Summary

Division No.	Division	Net Periodic Pension Cost	
		FY 2021-2022	FY 2022-2023 ¹
1	Corporate Shared Services	\$ 6,297,006	\$ 5,986,679
2	Gas	(188,972)	1,373,514
4	Manufacturing	(374,362)	88,864
6	Steam	536,636	721,522
7	West Street Chilled Water	255,229	237,397
20	Water Company	2,187,880	1,602,511
92	Wastewater	1,780,174	1,240,148
	Total	\$ 10,493,591	\$ 11,250,635

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

Net Periodic Pension Cost (NPPC) is the accrual expense/(income) entry on the income statement for plan benefits. This amount is determined separately from the employer contribution amount. The determination of this number involves actuarial calculations performed in accordance with rules set forth in FASB ASC 715-30. A 5-year history of the plan's NPPC is shown below.



B. Participant Demographics as of September 30, 2022

Participants	Number	Estimated Payroll for 2022-2023
Actives	1,020	\$ 87,053,210
Vested Terminated	229	N/A
Retirees and Beneficiaries	950	N/A
Total	2,199	\$ 87,053,210

C. Accounting Liabilities and Assets

	As of October 1, 2021 for 2021-2022 Expense	As of September 30, 2022 for Disclosure and 2022-2023 Expense
1. a. Fair Value of Assets	\$ 433,322,669	\$ 367,035,970
b. Market-Related Value of Assets	\$ 433,322,669	\$ 367,035,970
2. Effective Discount Rate	2.73%	5.15%
3. Accumulated Benefit Obligation (ABO)		
a. Actives	\$ 192,990,854	\$ 126,624,714
b. Vested Terminated	23,812,842	17,566,286
c. Retirees and Beneficiaries	<u>225,313,573</u>	<u>185,180,362</u>
d. Total	\$ 442,117,269	\$ 329,371,362
4. Obligation for Future Salary Increases	<u>50,952,046</u>	<u>26,837,057</u>
5. Projected Benefit Obligation (PBO)	\$ 493,069,315	\$ 356,208,419
6. Service Cost	\$ 17,002,093	\$ 10,136,895
7. Net Periodic Pension Cost	\$ 10,493,591	\$ 11,250,635 ¹

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

1. Liabilities

The **Projected Benefit Obligation (PBO)** and **Accumulated Benefit Obligation (ABO)** are actuarial present values as of a date of all benefits attributed by the pension benefit formula to employee service rendered prior to that date. The PBO is measured using assumptions as to future compensation levels if the pension benefit formula is based on those future compensation levels, whereas the ABO includes no assumption about future compensation levels.

Under FASB ASC 715-30-25-1, a liability is recognized on the balance sheet if the PBO exceeds the fair value of assets. Likewise, an asset is recognized on the balance sheet if the PBO is less than the fair value of assets.

Components of the PBO which have not yet been recognized in expense are recorded as adjustments to Accumulated Other Comprehensive Income.

The liability measurements in this report are not appropriate for assessing the sufficiency of plan assets to cover the cost of settling plan obligations in the event the plan is terminated.

Further, additional contributions from the employer could be needed in the future even if asset values are equal to 100% of liabilities as measured for accounting purposes.

2. Assets

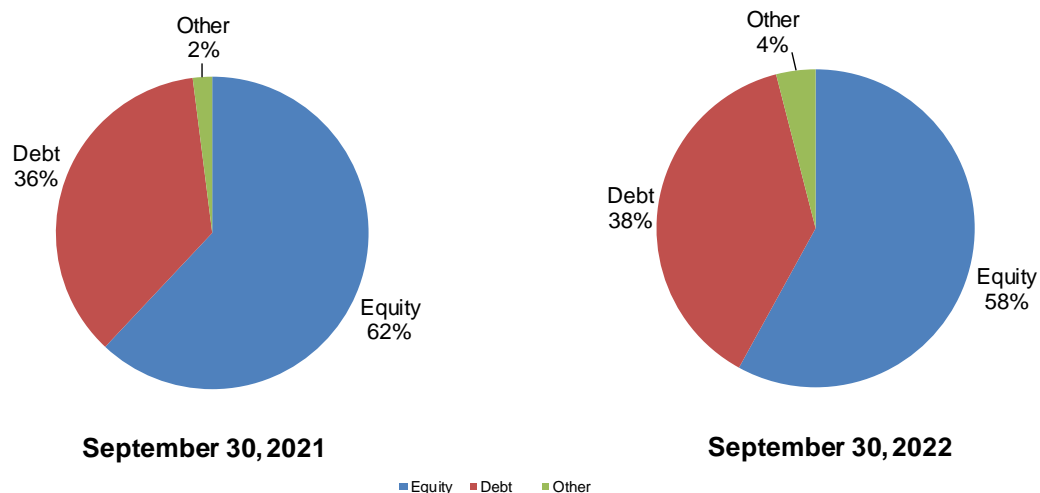
The **Fair Value of Assets (FVA)** is equal to the market value of assets, excluding any receivable contributions made for a prior plan year after the measurement date. As of September 30, 2021, the FVA was \$433,322,669 and as of September 30, 2022, the FVA is \$367,035,970.

It is our understanding that the investment policy's targeted weighted-average asset allocations by asset class are as follows:

Investment Policy Targeted Asset Allocations	
Asset Class	Target Allocation
Equity Securities	60%
Debt Securities	40%
Cash and Cash Equivalents	0%
Other	0%
Total	100%

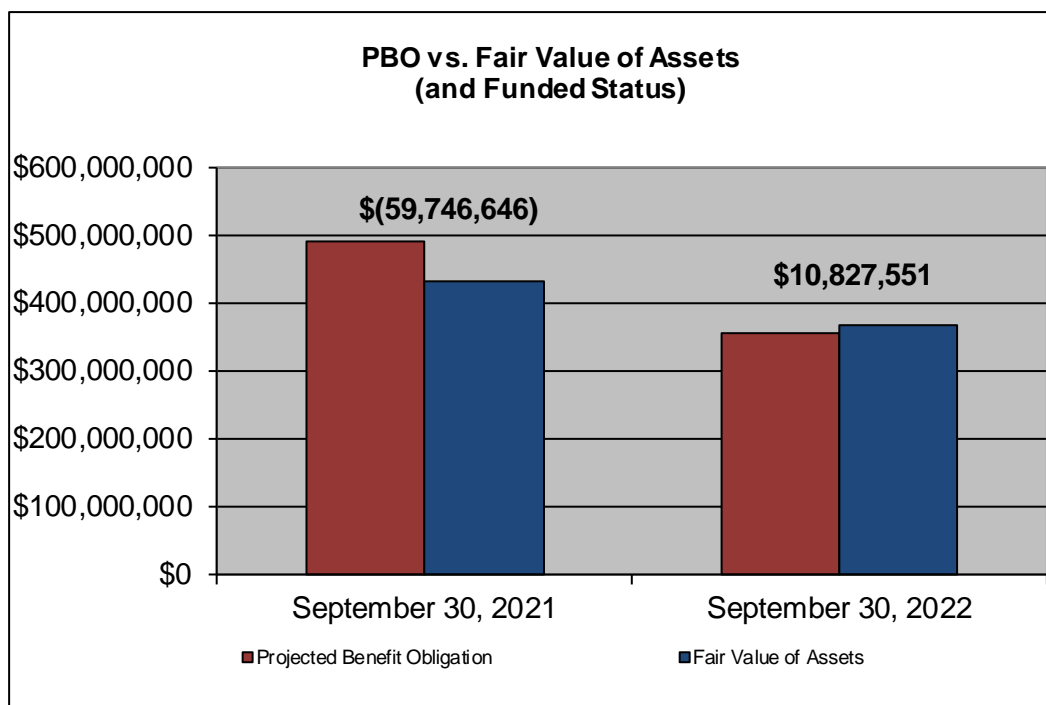
The target asset allocation above should be reviewed periodically against actual asset allocations as shown below. Furthermore, from time to time the plan's investment policy itself should be reviewed to ensure that the objectives stated in the policy are consistent with the plan sponsor's investment goals and risk tolerance, particularly as the plan approaches the point at which the value of plan assets equals or exceeds PBO.

Asset Allocation as of Prior and Current Measurement Dates



D. Funded Status and Accumulated Other Comprehensive Income

The **Funded Status** is defined as the Market Value of Assets minus the Projected Benefit Obligation (PBO). Under FASB ASC 715-30-25-1, a liability is recognized on the balance sheet if the PBO exceeds the fair value of assets (i.e., the Funded Status is negative). Conversely, an asset is recognized on the balance sheet if the PBO is less than the fair value of assets (i.e., the Funded Status is positive). The graph below compares the Fair Value of Assets to the PBO as of the end of the prior and current fiscal years. The corresponding Funded Status is shown above each column.



Under FASB ASC 715-30-25-4, the employer must recognize as **Accumulated Other Comprehensive Income (AOCI)** any amount of **Net (Gain)/Loss, Net Transition Obligation/(Asset)** and **Net Prior Service Cost/(Credit)** that has not yet been recognized as a component of expense. As these amounts are amortized and expensed in future years, the AOCI is written down. Similarly, as new (Gains)/Losses arise or new Prior Service Costs/(Credits) are established, the amount of AOCI will be adjusted.

The AOCI as of September 30, 2021 was \$95,376,064 and the AOCI as of September 30, 2022 is \$34,998,067.

E. Expense for 2022-2023

The NPPC (prior to any curtailment or settlement recognition) for the fiscal year ending September 30, 2023 is expected to be \$11,250,635. This expense is based upon the September 30, 2022 FTSE Pension Discount Curve, the plan participant census as of September 30, 2022 and plan assets as of September 30, 2022. The actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

F. Interim Period Statements of Financial Position

Under FASB ASC 715-30-35-65, an employer must report the funded status in its interim-period statements of financial position equal to the funded status reported in its previous year-end statement of financial position adjusted for (a) subsequent accruals of net periodic benefit cost arising from the service cost, interest cost and return on plan assets components of expense and (b) subsequent contributions to a funded plan or benefit payments from an unfunded plan. Page III-3 of this report shows the components of 2022-2023 net periodic benefit cost by fiscal quarter. The employer must use this type of information in conjunction with its plan contributions during the year to adjust the funded status that is reported in its 2022-2023 interim-period statements as shown on page III-4. However, if the funded status is remeasured due to a mid-year event (e.g., a plan amendment, a curtailment or a settlement) such remeasured funded status with adjustments shall be reported in subsequent interim periods.

G. No Changes in Plan Provisions

This valuation reflects identical plan provisions to those recognized in the prior valuation prepared for the plan. Plan provisions are summarized in Section VIII.

H. Changes in Actuarial Assumptions

The mortality projection assumption was updated to reflect the MP-2021 projection scale recently published by the Society of Actuaries. Discount rates were adjusted in accordance with FASB ASC 715-30-35-44. The expected long-term rate of return on plan assets was changed to reflect updated capital market expectations. Earnings progression, taxable wage base and IRC limitations assumptions were updated to reflect recent economic trends in inflation and financial markets in order to remain consistent with the discount rate. Actuarial assumptions are summarized in Section VII. The following exhibit displays the approximate effect of various assumption changes on the PBO and Service Cost:

Approximate Effect of Year-End Assumption Changes	PBO (\$ Thousands)	Service Cost ³ (\$ Thousands)
1. September 30, 2022 prior to assumption changes:	\$ 493,198	\$ 16,311
2. Effect of Change in Discount Rate from 2.73% to 5.15% ¹ :	(138,946)	(6,282)
3. Effect of Change in Mortality Assumptions:	1,282	35
4. Effect of Changes in all Other Assumptions ² :	674	73
5. September 30, 2022 after assumption changes:	\$ 356,208	\$ 10,137

¹ Effective discount rates shown for illustrative purposes. The PBO and Service Cost were actually calculated using the full yield curve as of each measurement date.

² Earnings progression, taxable wage base and IRC limitations assumptions were updated to reflect changes in inflation expectations as of September 30, 2022.

³ Includes interest to the end of next fiscal year.

I. Recent Accounting Standards Changes

The Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2018-14 in August of 2018 as part of the disclosure framework project. The disclosure framework project's objective and primary focus are to improve the effectiveness of disclosures in the notes to financial statements by facilitating clear communication of the information required by generally accepted accounting principles (GAAP) that is most important to users of each entity's financial statements.

The amendments in this Update modify the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The following disclosure requirements are removed from Subtopic 715-20:

- a. The amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year.
- b. The amount and timing of plan assets expected to be returned to the employer.
- c. Related party disclosures about the amount of future annual benefits covered by insurance and annuity contracts and significant transactions between the employer or related parties and the plan.
- d. For nonpublic entities, the reconciliation of the opening balances to the closing balances of plan assets measured on a recurring basis in Level 3 of the fair value hierarchy. However, nonpublic entities will be required to disclose separately the amounts of transfers into and out of Level 3 of the fair value hierarchy and purchases of Level 3 plan assets.
- e. For public entities, the effects of a one-percentage-point change in assumed health care cost trend rates on the (a) aggregate of the service and interest cost components of net periodic benefit costs and (b) benefit obligation for postretirement health care benefits.

The following disclosure requirements are added to Subtopic 715-20:

- a. The weighted-average interest crediting rates for cash balance plans and other plans with promised interest crediting rates.
- b. An explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period.

The amendments in this Update also clarify the disclosure requirements in paragraph 715-20-50-3, which state that the following information for defined benefit pension and other post-retirement benefit plans should be disclosed:

- a. The projected benefit obligation (PBO) and fair value of plan assets for defined benefit pension plans with PBOs in excess of plan assets.
- b. The accumulated benefit obligation (ABO) and fair value of plan assets for defined benefit pension plans with ABOs in excess of plan assets.

- c. The accumulated postretirement benefit obligation (APBO) and fair value of plan assets for other post-retirement benefit plans with APBOs in excess of plan assets.

The amendments in this Update became effective for fiscal years ending after December 15, 2020 for Public Business Entities¹ and for fiscal years ending after December 15, 2021 for all other entities.

An entity should apply the amendments in this Update on a retrospective basis to all periods presented.

¹ For purposes of FASB, a Public Business Entity is an enterprise: (a) whose debt or equity securities are traded in a public market, either on a stock exchange or in the over-the-counter market (including securities quoted only locally or regionally), or (b) whose financial statements are filed with a regulatory agency in preparation for the sale of any class of securities.

Section III – Net Periodic Pension Cost

A. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2022

1. Charges to Income from Operations ¹		
a. Service Cost including interest to end of year		\$ 17,002,093
2. Other Components of Net Periodic Pension Cost ²		
a. Interest Cost		\$ 10,737,587
b. Expected Return on Assets		
i. Market-Related Value at beginning of year	\$ 433,322,669	
ii. Expected distributions, weighted for timing	(9,296,382)	
iii. Expected contributions, weighted for timing	<u>11,456,250</u>	
iv. Expected Return Basis	\$ 435,482,537	
v. Long-term rate of return	5.12%	
vi. Expected Return on Assets [-(iv) x (v)]		(22,296,706)
c. Amortization of Transition Obligation/(Asset)		0
d. Amortization of Prior Service Cost/(Credit)		94,000
e. Amortization of Net (Gain)/Loss		<u>4,956,617</u>
f. Subtotal		\$ (6,508,502)
3. Net Periodic Pension Cost [1(a) + 2(f)]		\$ 10,493,591

¹ Other compensation costs arising from employee services rendered.

² Reported outside of income from operations.

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Charges to Income from Operations ²		
a. Service Cost including interest to end of year		\$ 10,136,895
2. Other components of Net Periodic Pension Cost ³		
a. Interest Cost		\$ 17,348,576
b. Expected Return on Assets		
i. Market-Related Value at beginning of year	\$ 367,035,970	
ii. Expected distributions, weighted for timing	(9,646,300)	
iii. Expected contributions, weighted for timing	<u>11,207,083</u>	
iv. Expected Return Basis	\$ 368,596,753	
v. Long-term rate of return	4.43%	
vi. Expected Return on Assets [-(iv) x (v)]		(16,328,836)
c. Amortization of Transition Obligation/(Asset)		0
d. Amortization of Prior Service Cost/(Credit)		94,000
e. Amortization of Net (Gain)/Loss		<u>0</u>
f. Subtotal		\$ 1,113,740
3. Net Periodic Pension Cost [1(a) + 2(f)]		\$ 11,250,635

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

² Other compensation costs arising from employee services rendered.

³ Reported outside of income from operations.

C. 2022-2023 Net Periodic Pension Cost By Fiscal Year Quarter

Pension Cost Component	Fiscal Year Quarter				Total for Fiscal Year ¹
	10/01/2022 to 12/31/2022	01/01/2023 to 03/31/2023	04/01/2023 to 06/30/2023	07/01/2023 to 09/30/2023	
1. Charges to Income from Operations - Other Compensation Costs Arising from Employee Services Rendered					
a. Service Cost ²	\$ 2,534,224	\$ 2,534,224	\$ 2,534,224	\$ 2,534,223	\$ 10,136,895
2. Other Components of Net Periodic Pension Cost – Reported Outside of Income from Operations					
a. Interest Cost ²	\$ 4,337,144	\$ 4,337,144	\$ 4,337,144	\$ 4,337,144	\$ 17,348,576
b. Expected Return on Assets ²	(4,082,209)	(4,082,209)	(4,082,209)	(4,082,209)	(16,328,836)
c. Amortized Recognition of:					
i. Transition Obligation/(Asset)	0	0	0	0	0
ii. Prior Service Cost/(Credit)	23,500	23,500	23,500	23,500	94,000
iii. Net (Gain)/Loss	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
d. Subtotal	<u>\$ 278,435</u>	<u>\$ 278,435</u>	<u>\$ 278,435</u>	<u>\$ 278,435</u>	<u>\$ 1,113,740</u>
3. Net Periodic Pension Cost [1(a) + 2(d)]	\$ 2,812,659	\$ 2,812,659	\$ 2,812,659	\$ 2,812,658	\$ 11,250,635

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement (e.g., plan amendment).

² In accordance with FASB ASC 715-30-35-65, these components of expense must be used to adjust the funded status of the plan reported at the end of the previous fiscal year to an interim-period reporting date. In addition, the funded status reported at an interim-period reporting date must be adjusted by employer contributions to the plan subsequent to the previous fiscal year-end. However, if the funded status is remeasured due to a mid-year event (e.g., a plan amendment, a curtailment or a settlement), such remeasured funded status with adjustments shall be reported in any subsequent interim-period. (See page III-4 for an illustration of the funded status progression.)

D. Estimated Funded Status for 2022-2023 Interim Period Statements of Financial Position

	Interim Period Ending		
	12/31/2022	03/31/2023	06/30/2023
1. Funded Status at Beginning of Interim Period	\$ 10,827,551	\$ 13,652,120	\$ 16,476,689
2. Sum of Service Cost, Interest Cost and Expected Return on Assets	\$ 2,789,159	\$ 2,789,159	\$ 2,789,159
3. Contributions during period ending on Interim Measurement Date ¹	\$ 5,613,728	\$ 5,613,728	\$ 5,613,728
4. Funded Status at End of Interim Period ² [(1) - (2) + (3)]	\$ 13,652,120	\$ 16,476,689	\$ 19,301,258

¹ Assumed based on funding policy contribution. Replace with actual employer contributions prior to inclusion in interim period statements of financial position.

² Assuming no interim remeasurement.

Section IV – Disclosure for Fiscal Year Ending September 30, 2022

The information required to be disclosed in your company financial statement is presented in the required format in the remainder of this Section IV in accordance with FASB ASC 715-20-50. FASB ASC 740-10 and FASB ASC 740-20-45 are applied to determine the applicable income tax effects of the funded status of the plan and the adjustments to Accumulated Other Comprehensive Income. This report does not consider deferred income tax effects.

Note that FASB ASC 715-30-35-43 requires that the year-end liability amounts in these reports be calculated using an appropriate discount rate based on September 30, 2022 financial markets. We have used individual spot rates from the full FTSE Pension Discount Curve, resulting in 5.15% as the effective discount rate, for year-end disclosure calculations in accordance with FASB ASC 715-30-35-44, which sets forth the methodology for determining the discount rate based upon the present value of the plan's expected future benefit payments which are discounted using a portfolio of high quality fixed income securities with maturities that match the timing of the expected benefit payments.

To the best of our knowledge, no actions were taken during this period that would cause recognition of a curtailment, a settlement or any special termination benefits under FASB ASC 715-30-35.

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 501,543,012	\$ 493,069,315
b. Service Cost	17,012,973	17,002,093
c. Interest Cost	9,281,748	10,737,587
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	(19,711,475)	(147,622,227)
f. Benefits Paid	<u>(15,056,943)</u>	<u>(16,978,349)</u>
g. Benefit Obligation at End of Year	\$ 493,069,315	\$ 356,208,419
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 363,754,642	\$ 433,322,669
b. Return on Plan Assets	63,476,300	(69,998,141)
c. Employer Contributions	21,148,670	20,689,791
d. Benefits Paid	<u>(15,056,943)</u>	<u>(16,978,349)</u>
e. Fair Value of Plan Assets at End of Year	\$ 433,322,669	\$ 367,035,970
3. Funded Status [2(e) - 1(g)]	\$ (59,746,646)	\$ 10,827,551
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 10,827,551
b. Current Liabilities	0	0
c. Noncurrent Liabilities	<u>(59,746,646)</u>	<u>0</u>
d. Funded Status	\$ (59,746,646)	\$ 10,827,551
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 94,957,373	\$ 34,673,376
b. Prior Service Cost/(Credit)	418,691	324,691
c. Transition Obligation/(Asset)	<u>0</u>	<u>0</u>
d. Accumulated Other Comprehensive Income	\$ 95,376,064	\$ 34,998,067
6. Weighted Average Assumptions used to determine benefit obligations		
a. Effective Discount Rate	2.73% ¹	5.15% ²
b. Rate of Compensation Increase	4.32%	4.40%

¹ The effective discount rate for Service Cost is 2.71% and for Interest Cost is 1.64%.

² The effective discount rate for Service Cost is 2.93% and for Interest Cost is 1.95%.

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 17,012,973	\$ 17,002,093
b. Interest Cost	9,281,748	10,737,587
c. Expected Return on Plan Assets	(21,444,773)	(22,296,706)
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	94,000	94,000
f. Amortization of Net (Gain)/Loss	12,806,018	4,956,617
g. Net Periodic Benefit Cost	\$ 17,749,966	\$ 10,493,591
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (61,743,002)	\$ (55,327,380)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(12,806,018)	(4,956,617)
d. Amortization of Prior Service (Cost)/Credit	(94,000)	(94,000)
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ (74,643,020)	\$ (60,377,997)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ (56,893,054)	\$ (49,884,406)

Weighted-average assumptions used to determine net periodic benefit cost:

	Fiscal Year Ending	
	09/30/2021	09/30/2022
Effective Discount Rate	2.45%	2.73%
Expected Long-Term Return on Plan Assets	5.88%	5.12%
Rate of Compensation Increase	3.77%	4.32%

To calculate the expected long-term rate of return on assets, the plan sponsor used the plan assets fair market value and an expected long-term rate of return, based on a targeted 60 percent equity and 40 percent debt allocation for the plan.

	09/30/2021	09/30/2022
Projected Benefit Obligation	\$ 493,069,315	\$ 356,208,419
Accumulated Benefit Obligation	\$ 442,117,269	\$ 329,371,362
Fair Value of Plan Assets	\$ 433,322,669	\$ 367,035,970

B. Plan Asset Information

The employer's pension plan weighted-average asset allocations by asset class, in terms of dollar amounts and percentage of total, are as follows:

	09/30/2021		09/30/2022	
Equity securities	\$ 266,235,271	62%	\$ 214,312,864	58%
Debt securities	157,451,956	36%	139,436,404	38%
Real estate	0	0%	0	0%
Other	9,635,442	2%	13,286,702	4%
Total	\$ 433,322,669	100%	\$ 367,035,970	100%

The primary investment objective of the retirement funds is to earn a reasonable rate of return over a market cycle within a prudent level of risk. These investment objectives are long-term in nature.

NOTE TO EMPLOYER: Insert the Plan's Disclosure of Fair Value Measurements of Plan Assets under FASB ASC 715-20-50 here (e.g., Level 1, Level 2 or Level 3 assets).

C. Cash Flow Information

For the 2022-2023 fiscal year, the estimated employer contribution is \$22,454,911.

The following table illustrates the estimated pension benefit payments, which reflect expected future service, as appropriate, that are projected to be paid:

Year(s)	Estimated Benefit Payments
2022-2023	\$ 17,808,553
2023-2024	18,549,901
2024-2025	19,508,360
2025-2026	20,394,430
2026-2027	21,426,927
2027-2028 to 2031-2032	120,570,239

D. Additional Disclosures under FASB ASC 715-20-50

- No portion of the pension liability would be classified as a current liability because plan assets exceed the value of benefit obligations expected to be paid within the 12 months ending September 30, 2023.
- Sources of gains and losses related to changes in the benefit obligation for the fiscal year:

Liability (Gain)/Loss Source	Fiscal Year Ending	
	09/30/2021	09/30/2022
1. Actual Demographic Experience vs. Assumed Experience	\$ (7,506,428)	\$ (10,632,708)
2. Change to Discount Rate	(17,343,897)	(138,945,732)
3. Change to Mortality Assumptions	(2,863,762)	1,282,347
4. Other Assumption Changes	8,002,612	673,866
5. Total Liability Actuarial (Gain)/Loss	\$ (19,711,475)	\$ (147,622,227)

- There are no other significant changes in the benefit obligation or plan assets not otherwise apparent in the above disclosures.

Section V – Supporting Information

A. Development of Change in Accumulated Other Comprehensive Income

1. Accumulated Other Comprehensive Income as of previous Fiscal Year End	\$ 95,376,064
2. Change in Accumulated Other Comprehensive Income	
a. Actuarial (Gain)/Loss during Fiscal Year	
i. Liability (Gain)/Loss	\$(147,622,227)
ii. Asset (Gain)/Loss	<u>92,294,847</u>
iii. Total (Gain)/Loss	\$ (55,327,380)
b. Prior Service Cost/(Credit) established during Fiscal Year	\$ 0
c. Amounts Recognized in Expense during Fiscal Year	
i. Net (Gain)/Loss Recognized	\$ 4,956,617
ii. Net Prior Service Cost/(Credit) Recognized	94,000
iii. Net Transition Obligation/(Asset) Recognized	<u>0</u>
iv. Total	\$ 5,050,617
d. Change in Accumulated Other Comprehensive Income [(a.iii.) + (b) - (c.iv.)]	\$ (60,377,997)
3. Accumulated Other Comprehensive Income as of Current Fiscal Year End [(1) + (2.d.)]	\$ 34,998,067

B. Asset (Gain)/Loss

1. Fair Value at September 30, 2021	\$ 433,322,669
2. Actual distributions	(16,978,349)
3. Actual contributions	20,689,791
4. Expected return on Fair Value of Assets	<u>22,296,706</u>
5. Projected Fair Value at September 30, 2022	\$ 459,330,817
6. Actual Fair Value at September 30, 2022	\$ 367,035,970
7. Asset (Gain)/Loss [(5) - (6)]	\$ 92,294,847

C. Amortization of Prior Service Cost/(Credit)¹

Amendment #3² Dated July 1, 2007

1. PBO after amendment	\$ 184,301,286
2. PBO before amendment	\$ 181,548,979
3. Prior service cost [(1) - (2)]	\$ 2,752,307

Amortization Schedule			
Period	Unrecognized Amount at Beginning of Period	Amount Recognized during the Period	Unrecognized Amount at End of Period
07/01/2007 – 09/30/2008	\$ 2,752,307	\$ 201,472	\$ 2,550,835
10/01/2008 – 09/30/2009	2,550,835	251,840	2,298,995
10/01/2009 – 09/30/2010	2,298,995	201,472	2,097,523
10/01/2010 – 09/30/2011	2,097,523	201,472	1,896,051
10/01/2011 – 09/30/2012	1,896,051	201,472	1,694,579
10/01/2012 – 09/30/2013	1,694,579	201,472	1,493,107
10/01/2013 – 09/30/2014	1,493,107	201,472	1,291,635
10/01/2014 – 09/30/2015	1,291,635	201,472	1,090,163
10/01/2015 – 09/30/2016	1,090,163	201,472	888,691
10/01/2016 – 09/30/2017	888,691	94,000	794,691
10/01/2017 – 09/30/2018	794,691	94,000	700,691
10/01/2018 – 09/30/2019	700,691	94,000	606,691
10/01/2019 – 09/30/2020	606,691	94,000	512,691
10/01/2020 – 09/30/2021	512,691	94,000	418,691
10/01/2021 – 09/30/2022	418,691	94,000	324,691
10/01/2022 – 09/30/2023	324,691	94,000	230,691
10/01/2023 – 09/30/2024	230,691	94,000	136,691
10/01/2024 – 09/30/2025	136,691	94,000	42,691
10/01/2025 – 09/30/2026	42,691	42,691	0

¹ As reported by prior actuary in FASB ASC 715 report dated October 11, 2017.

² Note: Numerical sequence of amendments refers to those being amortized; does not refer to amendment number in plan document since many amendments do not address issues requiring separate amortization.

D. Amortization of Net (Gain)/Loss

	End of 2020-2021 Fiscal Year	End of 2021-2022 Fiscal Year
1. Projected Benefit Obligation	\$ 493,069,315	\$ 356,208,419
2. Fair Value of Plan Assets at measurement date	\$ 433,322,669	\$ 367,035,970
3. Net (Gain)/Loss	\$ 94,957,373	\$ 34,673,376
4. Net (Gain)/Loss not reflected in Market-Related Value		
a. Fair Value	\$ 433,322,669	\$ 367,035,970
b. Market-Related Value (MRV)	\$ 433,322,669	\$ 367,035,970
c. Amount included in unrecognized transition obligation or (asset), not yet reflected in MRV	\$ 0	\$ 0
d. Amount not reflected in MRV [(a) - (b) - (c)]	\$ 0	\$ 0
5. Net (Gain)/Loss subject to amortization [(3) + (4d)]	\$ 94,957,373	\$ 34,673,376
6. Greater of (1) or (4b)	\$ 493,069,315	\$ 367,035,970
7. 10% of (6)	\$ 49,306,932	\$ 36,703,597
8. Net (Gain)/Loss to be amortized [Excess of (5) over (7)]	\$ 45,650,441	\$ 0
9. Average future service of plan participants expected to receive benefits	9.210	9.220
10. Amortization amount [(8)/(9)]	\$ 4,956,617	\$ 0
11. Effective Discount Rate	2.73%	5.15%

E. Other Accounting-Related Information

1. Reconciliation of Unrecognized Net Actuarial (Gain)/Loss:	
a. Unrecognized Net Actuarial (Gain)/Loss as of September 30, 2021	\$ 94,957,373
b. Liability Actuarial (Gain)/Loss	(147,622,227)
c. Asset (Gain)/Loss	92,294,847
d. Amount Recognized in Pension Expense	(4,956,617)
e. Unrecognized Net Actuarial (Gain)/Loss as of September 30, 2022	\$ 34,673,376

2. Reconciliation of Funded Status:	
a. Funded Status as of Beginning of Year	\$ (59,746,646)
b. Total Recognized in Net Periodic Benefit Cost and AOCI	49,884,406
c. Employer Contributions	20,689,791 ¹
d. Funded Status at End of Year	\$ 10,827,551

3. Evaluation of Settlement Accounting Requirement for FYE 09/30/2022:	
a. Service Cost	\$ 17,002,093
b. Interest Cost	\$ 10,737,587
c. Annual lump sum distributions, annuity purchases or other settlements	\$ 11,126
d. Item (a) + Item (b) - Item (c)	\$ 27,728,554

Item (3.d) is equal to or greater than zero. Settlement Accounting was not required because Settlements were less than the sum of Service Cost and Interest Cost.

¹

Date	Amount
10/04/2021	\$ 1,778,433
11/03/2021	1,719,214
12/01/2021	1,719,214
01/03/2022	1,719,214
02/02/2022	1,719,214
03/11/2022	1,719,214
04/04/2022	1,719,214
05/03/2022	1,719,214
06/02/2022	1,719,215
07/01/2022	1,719,215
08/02/2022	1,719,215
09/02/2022	1,719,215
	\$ 20,689,791

Section VI - Summary of Assets

Investment Category	09/30/2021	09/30/2022
1. Cash	\$ 0	\$ 0
2. Cash equivalents	9,635,363	13,273,058
3. Government securities	0	0
4. Corporate		
a. Debt	0	0
b. Equity	0	0
5. Pooled or Mutual Funds		
a. Cash equivalents	0	0
b. Debt	157,451,956	139,436,404
c. Equity	266,235,271	214,312,864
6. Real estate and mortgages	0	0
7. Unallocated insurance contracts	0	0
8. Other		
a. Accrued income	79	13,644
b. Benefits payable	<u>0</u>	<u>0</u>
9. Fair value of assets	\$ 433,322,669	\$ 367,035,970

Section VII – Actuarial Methods and Assumptions

A. Actuarial Methods

1. Actuarial Funding Method

The Projected Unit Credit Funding Method is used in computing the service cost component of pension expense. The Projected Unit Credit Funding Method computes the projected benefit for each participant at expected retirement age and attributes a pro rata portion of the projected benefit to each year of employment based upon the plan's pattern of accrual. Each participant's Service Cost for the year is the present value of the change in the pro rata portion for the current year. The plan's Service Cost is the sum of all participants' individual service costs.

Each participant's Projected Benefit Obligation (PBO) is the pro rata portion of the projected benefit that is attributed to all prior years of service. The plan's PBO is the sum of all participants' individual PBOs.

Service Cost and Interest Cost are calculated using individual spot rates from the full FTSE Pension Discount Curve (formerly the Citi Curve) rather than using the equivalent single discount rate to determine these amounts.

2. Market-Related Value of Assets

Fair value is equal to the market value of assets as determined by the plan trustee, excluding any receivable contributions made for a prior plan year after the asset valuation date, and net of any payable expenses.

Market-Related Value of Assets equals fair value.

B. Actuarial Assumptions

1. Mortality: The active, vested terminated and retired participants of the plan are expected to exhibit mortality in accordance with the following published mortality tables:

- | | | |
|-----|--|---|
| a. | Pre-retirement Mortality: | Pri-2012 Total Dataset Employee Table projected from the 2012 base year using Scale MP-2021 mortality improvement rates |
| b. | Post-retirement Mortality: | |
| i. | Retired Participants: | Pri-2012 Total Dataset Retiree Table projected from the 2012 base year using Scale MP-2021 mortality improvement rates |
| ii. | Contingent Annuitants of Retired Participants: | Pri-2012 Total Dataset Retiree Table prior to Retired Participant death and Contingent Survivor Table after Retired Participant death projected from the 2012 base year using Scale MP-2021 mortality improvement rates |

Rationale: This assumption reflects the Society of Actuaries' most recent study (and updates thereto) on mortality which reflects current trends in mortality and expected mortality improvements.

2. **Termination:** The active participants are assumed to terminate their employment for causes other than death, disability or retirement in accordance with the sample annual rates as illustrated below.

Attained Age	Terminations per 1,000 Participants	
	Corporate Employees	Non-Corporate Employees
20	250	250
25	175	150
30	125	50
35	88	50
40	81	50
45	75	45
50	58	40
55	40	35
60+	40	35

Rationale: This assumption is based on the actuary's review of recent termination experience in this plan, adjusted for future expectations. The experience study was completed in September 2019.

3. **Discount Rate:** The Plan's expected future Projected Benefit Obligation (PBO) cash flows are discounted back to the Plan's measurement date using the spot rates in effect on the measurement date from the FTSE Pension Discount Curve as published on the Society of Actuaries website. The FTSE Pension Discount Curve is used as the hypothetical portfolio of high-quality debt instruments that would provide the necessary PBO cash flows to pay the benefits when due.

Years from Measurement Date	Annual Spot Rate as of 09/30/2022	Years from Measurement Date	Annual Spot Rate as of 09/30/2022	Years from Measurement Date	Annual Spot Rate as of 09/30/2022
0.5	4.16%	10.5	4.94%	20.5	5.64%
1.0	4.66	11.0	4.93	21.0	5.64
1.5	4.71	11.5	4.92	21.5	5.63
2.0	4.65	12.0	4.92	22.0	5.62
2.5	4.68	12.5	4.93	22.5	5.60
3.0	4.72	13.0	4.95	23.0	5.57
3.5	4.72	13.5	4.98	23.5	5.54
4.0	4.71	14.0	5.01	24.0	5.50
4.5	4.71	14.5	5.05	24.5	5.46
5.0	4.73	15.0	5.10	25.0	5.42
5.5	4.77	15.5	5.16	25.5	5.37
6.0	4.80	16.0	5.21	26.0	5.33
6.5	4.82	16.5	5.27	26.5	5.29
7.0	4.83	17.0	5.33	27.0	5.25
7.5	4.84	17.5	5.40	27.5	5.21
8.0	4.85	18.0	5.46	28.0	5.17
8.5	4.87	18.5	5.51	28.5	5.14
9.0	4.89	19.0	5.56	29.0	5.11
9.5	4.92	19.5	5.60	29.5	5.08
10.0	4.95	20.0	5.63	30.0+	5.05

**Equivalent Single Discount Rate for
09/30/2022 End of Year Disclosure
and FY2023 NPPC**

5.15%

4. **Expected Long-Term Rate of Return:** 4.43% per year, net of expenses.

5. **Earnings Progression:** The increase in the levels of participant compensation is assumed to increase in accordance with the annual rates¹ shown below:

Attained Age	Corporate Employees	Non-Corporate Employees
< 30	7.40%	7.65%
30-34	6.15	5.15
35-39	5.15	4.40
40-44	5.15	4.15
45-49	5.15	3.90
50-54	3.90	3.65
55+	3.65	3.40

¹ Includes inflation.

Rationale: This assumption is based on the actuary's review of recent earnings experience, adjusted for inflation as of the measurement date. This assumption was evaluated in an experience study which was completed in September 2019.

6. **Retirement Age:** A participant is assumed to retire in accordance with the annual rates as illustrated below.
- a. For Reduced Benefit Annuitants who are eligible for early commencement but do not meet the Rule of 85:

Age	Retirements Per 1,000 Eligible Participants	
	Corporate Employees	Non-Corporate Employees
45-59	40	25
60	200	50
61	50	50
62	200	100
63	200	250
64	200	150

- b. For Unreduced Benefit Retirees who meet the Rule of 85 or have reached Normal Retirement Age:

Age	Retirements Per 1,000 Eligible Participants															
	Years of Service															
	≤20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	≥35
55											200	200	200	200	200	200
56										250	250	130	130	130	130	130
57									300	300	150	150	150	150	150	150
58								350	350	180	180	180	180	180	180	180
59							400	400	200	200	200	200	200	200	200	200
60						400	400	200	200	200	200	200	200	200	200	200
61					400	400	200	200	200	200	200	200	200	200	200	200
62				400	400	200	200	200	200	200	200	200	200	200	200	200
63			400	400	200	200	200	200	200	200	200	200	200	200	200	200
64		400	400	200	200	200	200	200	200	200	200	200	200	200	200	200
65	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
66	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
67	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
68	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
69	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
70	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Rationale: This assumption is based on the actuary's review of recent retirement experience in this plan, adjusted for future expectations. The experience study was completed in September 2019.

7. **Social Security Taxable Wage Base Increase:** The benefits of this plan are determined, in part, by 35-year averages of the Social Security Taxable Wage Base. The Social Security Taxable Wage Base is assumed to increase at the annual rate of:

For 09/30/2022 End of Year Disclosure and FY2023 NPPC
2.90%

Rationale: This assumption is based upon inflation as of the measurement date in addition to the actuary's review of inflation experience since 1948 and the relative relationships between this assumption and national average wage growth.

8. **Disability:** None
9. **Expenses:** Administration and investment expenses necessary to the operation of this plan are assumed to be paid from plan assets and are recognized in the determination of the Expected Long-Term Rate of Return assumption.

- 10. Recognition of IRC Benefit and Compensation Limitations:** Consistent with FASB ASC 715-30-35-31, the benefit limitations under IRC Sections 415(b) and 401(a)(17) have been reflected in the determination of plan costs, and these limits are assumed to increase at the rate of:

For 09/30/2022 End of Year Disclosure and FY2023 NPPC
2.40%

Rationale: This assumption is based upon inflation as of the measurement date.

- 11. Marital Status:** 80% of participants are assumed to be married at the time of separation from service. Female spouses are assumed to be three years younger than their male counterparts.
- 12. Assumed Form of Payment:** Upon separation from service for causes other than death, 100% of active participants are assumed to elect the normal form of payment.

Surviving spouses of employees who separate from service due to death are assumed to commence payment in the normal form of annuity at the date of the participant's death.

Beneficiaries of non-married employees who separate from service due to death are assumed to receive a lump sum at the date of the participant's death.

Current deferred vested participants are assumed to elect the normal form at normal retirement age.

- 13. Changes in Actuarial Assumptions:** Reflected in this valuation are revised assumptions from the prior valuation as follows:

a. Mortality:

- i. Current: See item B.1. above
- ii. Prior:

Pre-retirement Mortality:

Pri-2012 Total Dataset Employee Table projected from the 2012 base year using Scale MP-2020 mortality improvement rates

Post-retirement Mortality:

a) Retired Participants:

Pri-2012 Total Dataset Retiree Table projected from the 2012 base year using Scale MP-2020 mortality improvement rates

b) Contingent Annuitants
of Retired Participants:

Pri-2012 Total Dataset Retiree Table prior to Retired Participant death and Contingent Survivor Table after Retired Participant death projected from the 2012 base year using Scale MP-2020 mortality improvement rates

- b. Discount Rate:
- i. Current: See item B.3. above
 - ii. Prior: FTSE Pension Discount Curve in effect at September 30, 2021 resulting in an Equivalent Single Discount Rate of 2.73%
- c. Expected Long-Term Rate of Return:
- i. Current: 4.43% per year, net of expenses
 - ii. Prior: 5.12% per year, net of expenses
- d. Earnings Progression:
- i. Current: See item B.5. above
 - ii. Prior:

Attained Age	Corporate Employees	Non-Corporate Employees
< 30	7.35%	7.60%
30-34	6.10%	5.10%
35-39	5.10%	4.35%
40-44	5.10%	4.10%
45-49	5.10%	3.85%
50-54	3.85%	3.60%
55+	3.60%	3.35%

- e. Social Security Taxable Wage Base Increase:
- i. Current: 2.90% per year
 - ii. Prior: 2.85% per year
- f. Recognition of IRC Benefit and Compensation Limitations:
- i. Current: 2.40%
 - ii. Prior: 2.35%

Consistent with FASB ASC 715-30-35-42, the changes above were made to reflect the plan sponsor's best estimate of future plan experience and to reflect changes in the yield of high grade corporate fixed income securities. Rudd and Wisdom, Inc. concurs with these assumptions.

Section VIII – Outline of Principal Plan Provisions

A. Identifying Data

1. Plan name: Citizens Energy Group Retirement Plan
2. Type of plan: Defined benefit
3. Plan sponsor: Citizens Energy Group
4. Plan Year: January 1 - December 31
5. EIN/PN: 35-6000930/002
6. Employer: Citizens Energy Group

B. Participation

1. An Employee enters the plan on the first day he or she becomes an Eligible Employee
2. Eligible Employee is:
 - a. a regular full-time employee who (i) works a regularly scheduled 40-hour work week 52 weeks a year or (ii) works a flexible schedule which could cause an employee to work more or less than 40 hours in a given week
 - b. a Customer Service Contact Center Employee who works a seasonal schedule consisting of: (i) a period of 39 weeks at a regularly scheduled 40-hour work week plus a period of 13 weeks during which the employee is not scheduled to work for Citizens
3. Independent Contractors are not considered Eligible Employees

C. Contributions

1. Participant: none
2. Employer: all amounts necessary to adequately finance plan benefits

D. Eligibility for Retirement

1. Normal Retirement: age 65 (first of month coincident with or next following)
2. Early Retirement: age 45 plus 5 years of Vesting Service
3. Disability Retirement: none

E. Retirement Benefit Monthly Amounts

1. Normal Retirement:

For individuals who became participants on or after January 1, 1996, the sum of (a) and (b).
For individuals who became participants on or before December 31, 1995, the sum of (a) and (b), but not less than (c):

 - a. Base Benefit: 1.40% of Final Average Earnings times Years of Benefit Service
 - b. Excess Benefit: 0.40% of Final Average Earnings in excess of Covered Compensation times Years of Benefit Service

- c. For individuals who became participants on or before December 31, 1995, the sum of (i) and (ii):
- (i) the Accrued Retirement Benefit determined under (a) and (b) above but based on Benefit Service earned on and after January 1, 1996 and based on Final Average Earnings and Covered Compensation at the benefit determination date.
 - (ii) the Frozen Accrued Retirement Benefit determined on December 31, 1995 multiplied by a fraction (not less than 1.0) where the numerator is the participant's Final Average Earnings at the determination date and the denominator is the participant's Final Average Earnings determined at December 31, 1995 using the definition of Final Average Earnings in effect at such time.

For purposes of the above formula, earnings used to determine the Final Average Earnings shall be limited as applicable by IRC Section 401(a)(17).

2. Late Retirement:

Same formula as Normal Retirement but not less than the Actuarially Equivalent Value of the Accrued Retirement Benefit determined at Normal Retirement.

3. Early Retirement:

If the participant is at least age 55 and meets the Rule of 85 (i.e., age plus years of Vesting Service is at least 85 years) then there is no reduction to the Vested Accrued Retirement Benefit for early retirement. If the participant does not meet the above conditions for unreduced early retirement, then the Early Retirement Benefit is equal to the Vested Accrued Retirement Benefit determined at the Early Retirement Date reduced $1/180^{\text{th}}$ for every month Early Retirement precedes Normal Retirement Date for the first 60 months, $1/360^{\text{th}}$ for each of the next 60 months, and reduced actuarially thereafter.

If the participant terminates prior to eligibility for Early Retirement, the amount equal to the Vested Accrued Retirement Benefit may commence early once the participant reaches age 45 utilizing the same reductions described above.

4. Disability:

For terminations due to disability, the same benefit as if the participant terminated for reasons other than disability.

F. Normal Form of Monthly Payment

5-Year Certain and Life Annuity^{1,2}

- ¹ If participant dies before 60 monthly payments have been paid, in lieu of receiving payments for the remaining 60 months the beneficiary may elect a lump sum actuarially equivalent to the value of remaining certain payments.
- ² Joint and 50% Survivor Annuity (actuarially equivalent to the 5-year Certain and Life Annuity) is the automatic form of payment for married participants.

G. Optional Forms of Payment

Other optional forms of payment are available that are actuarially equivalent to the Normal Form, subject to applicable spousal consent requirements. Optional forms of payment include:

Lump Sum¹

Joint and 50% Contingent Annuity² (available for spouse and non-spouse beneficiaries)

Joint and 75% Contingent Annuity² (available for spouse and non-spouse beneficiaries)

Joint and 100% Survivor Annuity (available for spouse and non-spouse beneficiaries)

Social Security Adjustment Option (with first 60 payments guaranteed)³

¹ Limited to \$10,000 except in the case of death benefits.

² Reduces to the contingent survivor percentage only upon the death of the retiree (i.e., does not reduce if the contingent annuitant pre-deceases the retiree).

³ This option is only available to Participants who are at least age 55 and meet the Rule of 85 (i.e., age plus years of Vesting Service is at least 85 years) at the time of retirement. The amount that is guaranteed for 60 months is the reduced monthly amount that is scheduled to commence when the Participant attains the adjustment age.

H. Vested Termination Benefits

1. Benefit: entitlement to vested percentage of Accrued Retirement Benefit

2. Vesting Schedule:

Years of Vesting Service	Vesting Percent ¹
Less than 5	0%
5 but less than 6	50%
6 but less than 7	60%
7 but less than 8	70%
8 but less than 9	80%
9 but less than 10	90%
10 or more	100%

¹ Participants who attain age 65 while employed by Citizens or any Affiliated Employer become 100% Vested.

3. Accrued Retirement Benefit: the monthly benefit that a participant has accrued before reaching Normal Retirement Age payable in the Normal Form of payment beginning at Normal Retirement Age; the amount of the Accrued Retirement Benefit is determined when a participant terminates his employment and is calculated like the Normal Retirement Benefit but using only Years of Benefit Service and Final Average Earnings determined at the date of termination.

I. Pre-retirement Death Benefits

If a married participant dies prior to his or her Annuity Starting Date, the surviving spouse shall receive a monthly annuity¹ commencing on the first of the month following death equal to 60%² of the participant's Vested Accrued Retirement Benefit. In the event the surviving spouse dies prior to receiving 60 monthly annuity payments, then the spouse's named beneficiary shall receive a lump sum equal to 60 times the monthly annuity amount offset by the sum of annuity amounts already received by the surviving spouse.

¹ The surviving spouse may elect an actuarially equivalent single lump sum in lieu of a monthly annuity.

² 60% is reduced by 0.5% for each year that the spouse is more than 5 years younger than the participant.

If a non-married participant (or a married participant who elects, subject to spousal consent, to name a non-spouse beneficiary) dies prior to his or her annuity starting date, the non-spouse beneficiary will receive a single lump sum that is Actuarially Equivalent to 60% times the Vested Accrued Retirement Benefit determined at the date of death.

J. Post-Retirement Death Benefits

No death benefit is payable other than the continuance of benefit payments to a surviving spouse or beneficiary if provided under the optional form of payment elected at the time of retirement.

K. Basis of Actuarial Equivalence

For purposes of monthly annuity options, determined in accordance with Tables A, B and C included at the end of the Plan Document.

For all other ages not shown in Tables A, B and C of the Plan Document and for purposes of lump sums, determined using the UP-1984 Mortality Table set forward ½ year for participants and set back 3½ years for beneficiaries and a 7.0% interest rate assumption compounded annually.

L. Covered Compensation

The average of the contribution and benefit bases in effect under section 230 of the Social Security Act for each year in the 35-year period ending with the year in which the participant attains the social security retirement age as defined under Code Section 415(b)(8), as set forth in the transitional covered compensation table for each year prior to 1995 and for each year on and after 1995 the covered compensation table (as defined in Internal Revenue Service Notice 89-70 and any applicable notice thereafter) published by the Internal Revenue Service for each such year. The determination of Covered Compensation will be made as of the date of determination, or, if earlier, the retirement, death, or separation from service of the participant.

M. Final Average Earnings

The average monthly earnings amount determined by using the average Basic Yearly Earnings received from Citizens for the period of five (5) Plan Years which produce the highest average out of the last ten (10) Plan Years prior to the date of determination, or if earlier, the retirement, death or separation from service of a participant; provided, however, if a participant retires, dies or separates from service during a Plan Year that partial Plan Year will be considered as well as the preceding ten (10) Plan Years. "Final Average Earnings" for participants who retire, die or separate from service during a Plan Year may be calculated by including such partial Plan Year as part of one (1) of the five (5) highest Plan Years. The monthly earnings for the remaining months needed to complete any partial Plan Year will be based on the average monthly earnings for the complete Plan Year with the next highest earnings not being used as one (1) of the four (4) complete Plan Years. Such monthly earnings in the preceding sentence will be determined by determining the average daily earnings of such Plan Year (Basic Yearly Earnings for that Plan Year divided by three hundred sixty-five (365) or three hundred sixty-six (366) as applicable) and multiplying the result by the number of days remaining in the partial Plan Year.

If a participant received Basic Yearly Earnings from Citizens for fewer than five (5) Plan Years during the period described above, Final Average Earnings means the monthly earnings determined by using the average Basic Yearly Earnings received from Citizens for the entire period for which the participant received Basic Yearly Earnings from Citizens.

Final Average Earnings for any period of time while an Eligible Employee is in the "suspense file" (pursuant to the "indefinite absence due to personal or occupational illness or injury" policies of Citizens) will be determined by calculating Basic Yearly Earnings as zero for each Plan Year such Eligible Employee is in such suspense period. If such suspense period is ten (10) Plan Years or more, Final Average Earnings will equal the last Basic Yearly Earnings such participant received immediately prior to his or her suspense period, annualized.

N. Vesting Service

For periods prior to 2007, based on the records of the employer and the terms of the Plan then in effect. For periods on and after January 1, 2007, any period of time during which an Eligible Employee is employed by Citizens or an Affiliated Employer. Special rules apply to participants who retire or separate from service and are later re-employed.

O. Benefit Service

For periods prior to 1975, based on the records of the employer and the terms of the Plan then in effect. For periods on and after January 1, 1975, one year or fraction thereof for each year of Vesting Service as a participant except no Benefit Service will be earned with respect to any period of service with an Affiliated Employer.

P. Affiliated Employer

Any corporation which is a member of a controlled group of corporations (as defined in Code section 414(b)) which includes Citizens; any trade or business (whether or not incorporated) which is under common control (as defined in Code section 414(c)) with Citizens; any organization (whether or not incorporated) which is a member of an affiliated service group (as defined in Code section 414(m)) which includes Citizens; and any other entity required to be aggregated with Citizens pursuant to regulations under Code section 414(o). For purposes of Code section 415, in applying Code section 414(b) and (c) to determine an Affiliated Employer, the phrase "more than 50 percent" will be substituted for the phrase "at least 80 percent" each place it appears in Code section 1563(a)(1). Each such Affiliated Employer will be included as an Affiliated Employer only for such period or periods during which such employer is under such common control, so affiliated, or so aggregated and only to the extent required by any applicable provision of the Code.

Q. Basic Yearly Earnings

The cash remuneration of a participant received from Citizens which is reportable as wages for federal income tax purposes,

- Including: (a) amounts excludable from the taxable income of the participant because of an election under Code Sections 401(k), 125, and 132(f)(4), (b) for amounts paid on or after January 1, 1988, annual payments under the management incentive program,

(c) for amounts paid on or after January 1, 1988, quarterly profit sharing payments to Manufacturing Division employees of Citizens; and

- Excluding: (a) incentive compensation payments made pursuant to the Citizens Energy Group Executive Incentive Plan, (b) overtime payments and any other additional or extraordinary compensation, except as specifically provided below

For any participant who separates from service on or before December 31,

- any cash remuneration not otherwise excluded hereunder that is earned during the Plan Year but paid or reported in the following Plan Year will be included as Basic Yearly Earnings for the Plan Year ending on such December 31; and
- any vacation pay treated as sold in accordance to Citizens' paid time off policy but not actually paid or reported until the following Plan Year will be included as Basic Yearly Earnings for the Plan Year ending on such December 31.

Basic Yearly Earnings include, but are not limited to, regular pay, permission pay, disciplinary pay, on call compensation, light duty, sick pay, hospital pay, work-related injury, family sick pay, family death pay, vacation taken or sold, paid time off, holiday pay, pay for holiday worked, short-term disability pay, height differential, shift differential, civic duty, retroactive back pay, union time pay, gainsharing, executive bonus, lump sum salary incentive, performance bonus, and Citizens variable plan pay; provided, however, the following payments are not included in Basic Yearly Earnings if not paid until after retirement or separation from service: (a) vacation not taken or not treated as sold due to Citizens rules, (b) executive bonus, (c) quarterly profit sharing payments to Manufacturing Division employees of Citizens, and (d) Citizens variable plan pay.

Basic Yearly Earnings shall be limited as required under Code section 401(a)(17); in general, for Plan Years beginning on or after January 1, 1996,

- for an individual who became a participant on or before December 31, 1995, Basic Yearly Earnings will not exceed \$235,840 (increased by the applicable Cost of Living Adjustment for the year, if any, prescribed by the Secretary of the Treasury for governmental plans); and
- for an individual who became a participant after December 31, 1995, Basic Yearly Earnings used in determining benefit accruals in any Plan Year beginning after December 31, 2001 will not exceed \$200,000 (adjusted for cost-of-living increases in accordance with Code section 401(a)(17)(B)) for determination periods beginning after December 31, 2001, \$170,000 for determination periods beginning in 2000 or 2001, \$160,000 for determination periods beginning in 1997, 1998 or 1999, and \$150,000 the for determination period beginning in 1996.

Section IX - Summary of Participant Data

A. Participant Data Reconciliation

	Active Participants ¹	Current Payment Status	Vested Terminated	Total
1. As of September 30, 2021	1,048	932	210	2,190
2. Change of status				
a. normal retirement	(2)	4	(2)	0
b. late retirement	(12)	12	0	0
c. early retirement	(24)	27	(3)	0
d. disability	0	0	0	0
e. death	(1)	(28)	0	(29)
f. nonvested termination	(45)	0	0	(45)
g. vested termination	(27)	0	27	0
h. completion of payment	0	(1)	(3)	(4)
i. rehired	1	0	0	1
j. other	0	4 ²	0	4
k. net changes	(110)	18	19	(73)
3. New participants	82	0	0	82
4. As of September 30, 2022	1,020	950	229	2,199

¹ Includes any participant who might be beyond Normal Retirement Date.

² New alternate payees that commenced benefits during the year pursuant to the terms of a QDRO.

B. Age/Service Table

Age and Service Table for Actives as of September 30, 2022

Current Age	Current Years of Benefit Service														Percent
	$t < 1$	$1 \leq t < 2$	$2 \leq t < 3$	$3 \leq t < 4$	$4 \leq t < 5$	$5 \leq t < 10$	$10 \leq t < 15$	$15 \leq t < 20$	$20 \leq t < 25$	$25 \leq t < 30$	$30 \leq t < 35$	$35 \leq t < 40$	$40 \leq t$	Total	of Total
$x < 25$	4	12	5	2	4	0	0	0	0	0	0	0	0	27	2.65%
$25 \leq x < 30$	7	12	13	12	6	8	0	0	0	0	0	0	0	58	5.69%
$30 \leq x < 35$	5	12	7	16	9	30	6	0	0	0	0	0	0	85	8.33%
$35 \leq x < 40$	4	10	8	20	8	25	21	2	0	0	0	0	0	98	9.61%
$40 \leq x < 45$	1	2	6	8	6	26	28	11	9	0	0	0	0	97	9.51%
$45 \leq x < 50$	0	5	7	9	7	35	31	11	16	1	0	0	0	122	11.96%
$50 \leq x < 55$	1	7	2	7	4	32	36	8	23	13	9	1	0	143	14.02%
$55 \leq x < 60$	0	2	1	4	1	35	56	17	17	7	12	7	0	159	15.59%
$60 \leq x < 65$	0	0	1	7	2	41	54	8	16	6	9	9	13	166	16.27%
$x \geq 65$	0	1	0	2	0	22	22	3	4	2	1	4	4	65	6.37%
Service Totals	22	63	50	87	47	254	254	60	85	29	31	21	17	1,020	100.00%
Percent of Total	2.16%	6.18%	4.90%	8.53%	4.61%	24.90%	24.90%	5.88%	8.33%	2.84%	3.04%	2.06%	1.67%	100.00%	

Average Attained Age: 49.05

Average Benefit Service: 11.29

C. Summary of Deferred Vested Participants

Deferred Vested Participants by Age as of September 30, 2022

Age	Count	Sum of Monthly Benefits	Average Monthly Benefits
$x < 35$	2	\$ 383	\$ 192
$35 \leq x < 40$	14	8,676	\$ 620
$40 \leq x < 45$	22	12,247	\$ 557
$45 \leq x < 50$	26	25,461	\$ 979
$50 \leq x < 55$	34	34,888	\$ 1,026
$55 \leq x < 60$	55	49,446	\$ 899
$60 \leq x < 65$	63	47,918	\$ 761
$x \geq 65$	13	3,885	\$ 299
Total	229	\$ 182,904	\$ 799

D. Summary of Retirees and In-Pay Beneficiaries

Retirees/In-Pay Beneficiaries by Age as of September 30, 2022

Age	Count	Sum of Monthly Benefits	Average Monthly Benefits
$x < 55$	9	\$ 5,595	\$ 622
$55 \leq x < 60$	49	56,559	\$ 1,154
$60 \leq x < 65$	155	274,671	\$ 1,772
$65 \leq x < 70$	230	333,008	\$ 1,448
$70 \leq x < 75$	202	344,493	\$ 1,705
$75 \leq x < 80$	145	188,805	\$ 1,302
$80 \leq x < 85$	87	124,455	\$ 1,431
$85 \leq x < 90$	59	89,124	\$ 1,511
$90 \leq x$	14	16,948	\$ 1,211
Total	950	\$ 1,433,658	\$ 1,509

Section X – Glossary

Accumulated Benefit Obligation (ABO): The actuarial present value of benefits (whether vested or nonvested) attributed by the pension benefit formula to employee service rendered before a specified date and based on employee service and compensation (if applicable) prior to that date. The accumulated benefit obligation differs from the projected benefit obligation in that it includes no assumption about future compensation levels. For plans with flat-benefit or non-pay-related pension benefit formulas, the accumulated benefit obligation and the projected benefit obligation are the same.

Amortization: This refers to the systematic recognition in net pension cost over several periods of amounts previously recognized in other comprehensive income, that is, prior service costs or credits, gains or losses, and the transition asset or obligation.

Attribution: The process of assigning pension benefits or cost to periods of employee service.

Curtailement: An event that significantly reduces the expected years of future service of present employees or eliminates for a significant number of employees the accrual of defined benefits for some or all of their future services.

Discount Rate: The interest rate used to adjust for the time value of money.

Expected Long-Term Rate of Return on Plan Assets: An assumption as to the rate of return on plan assets reflecting the average rate of earnings expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation.

Expected Return on Plan Assets: An amount calculated as a basis for determining the extent of delayed recognition of the effects of changes in the fair value of assets. The expected return on plan assets is determined based on the expected long-term rate of return on plan assets and the market-related value of plan assets.

Gain or Loss: A change in the value of either the projected benefit obligation or the plan assets resulting from experience different from that assumed or from a change in an actuarial assumption. Gains and losses that are not recognized in net periodic pension cost when they arise are recognized in other comprehensive income. Those gains or losses are recognized in subsequent years as a component of net periodic pension cost.

Gain or Loss Component (of Net Periodic Pension Cost): The sum of (a) the difference between the actual return on plan assets and the expected return on plan assets and (b) the amortization of the net gain or loss recognized in accumulated other comprehensive income. The gain or loss component is the net effect of delayed recognition of gains and losses in determining net periodic pension cost (the net change in the gain or loss) in accumulated other comprehensive income except that it does not include changes in the projected benefit obligation occurring during the period and deferred for later recognition in net periodic pension cost.

Interest Cost Component (of Net Periodic Pension Cost): The increase in the projected benefit obligation due to passage of time.

Market-Related Value of Plan Assets: A balance used to calculate the expected return on plan assets. Market-related value can be either fair market value or a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years. Different ways of calculating market-related value may be used for different classes of assets, but the manner of determining market-related value shall be applied consistently from year to year for each asset class.

Net Periodic Pension Cost: The amount recognized in an employer's financial statements as the cost of a pension plan for a period. Components of net periodic pension cost are service cost, interest cost, expected return on plan assets, amortization of gain or loss, amortization of prior service cost or credit, and amortization of the transition asset or obligation.

Plan Amendment: A change in the terms of an existing plan or the initiation of a new plan. A plan amendment may increase benefits, including those attributed to years of service already rendered.

Plan Assets: Assets – usually stocks, bonds, and other investments—that have been segregated and restricted (usually in a trust) to provide benefits. Plan assets include amounts contributed by the employer (and by employees for a contributory plan) and amounts earned from investing the contributions, less benefits paid. For purposes of FASB ASC 715-20 and 715-30, assets not segregated in a trust or otherwise effectively restricted so that they cannot be used by the employer for other purposes are not plan assets even though it may be intended that such assets be used to provide pensions.

Prior Service Cost: The cost of retroactive benefits granted in a plan amendment.

Projected Benefit Obligation (PBO): The actuarial present value as of a date of all benefits attributed by the pension benefit formula to employee service rendered prior to that date. The projected benefit obligation is measured using assumptions as to future compensation levels if the pension benefit formula is based on those future compensation levels (pay-related, final-pay, final-average-pay, or career-average-pay plans).

Public Business Entity: An enterprise: (a) whose debt or equity securities are traded in a public market, either on a stock exchange or in the over-the-counter market (including securities quoted only locally or regionally), or (b) whose financial statements are filed with a regulatory agency in preparation for the sale of any class of securities.

Retroactive Benefits: Benefits granted in a plan amendment (or initiation) that are attributed by the pension benefit formula to employee services rendered in periods prior to the amendment. The cost of the retroactive benefits is referred to as prior service cost.

Service Cost Component (of Net Periodic Pension Cost): The actuarial present value of benefits attributed by the pension benefit formula to services rendered by employees during that period. The service cost component is a portion of the projected benefit obligation and is unaffected by the funded status of the plan.

Settlement: An irrevocable action that relieves the employer (or the plan) of primary responsibility for a pension benefit obligation and eliminates significant risks related to the obligation and the assets used to effect the settlement. Examples of transactions that may constitute a settlement include (a) making lump-sum cash payments to plan participants in exchange for their rights to receive specified pension benefits and (b) purchasing nonparticipating annuity contracts to cover vested benefits.

Statement of Financial Accounting Standards (SFAS) for Pension Accounting prior to Accounting Standards Codification: The expense and disclosure information in this report has been determined in accordance with the applicable sections of FASB ASC 715-20 and 715-30. Prior to Accounting Standards Codification during 2009, expense and disclosure information was determined in accordance with the following accounting standards:

- SFAS No. 87 – Employers’ Accounting for Pensions
- SFAS No. 88 – Employers’ Accounting for Settlement and Curtailment of Defined Benefit Pension Plans and for Termination Benefits
- SFAS No. 132(R) – Employers’ Disclosures about Pensions and Other Postretirement Benefits (revised 2003)
- SFAS No. 158 – Employers’ Accounting for Defined Benefit Pension and Other Postretirement Plans

Appendix:

Disclosure and Expense Results by Division

Division 1: Corporate Shared Services

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 248,412,252	\$ 248,385,678
b. Service Cost	9,478,082	9,417,158
c. Interest Cost	4,851,069	5,645,607
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	(9,575,076)	(80,083,682)
f. Benefits Paid	(4,780,649)	(6,837,401)
g. Benefit Obligation at End of Year	\$ 248,385,678	\$ 176,527,360
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 180,166,222	\$ 218,288,062
b. Return on Plan Assets	31,370,116	(41,041,671)
c. Employer Contributions	11,532,373	11,484,214
d. Benefits Paid	(4,780,649)	(6,837,401)
e. Fair Value of Plan Assets at End of Year	\$ 218,288,062	\$ 181,893,204
3. Funded Status [2(e) - 1(g)]	\$ (30,097,616)	\$ 5,365,844
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 5,365,844
b. Current Liabilities	0	0
c. Noncurrent Liabilities	(30,097,616)	0
d. Funded Status	\$ (30,097,616)	\$ 5,365,844
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	28,674,170	\$ (1,558,550)
b. Prior Service Cost/(Credit)	178,921	135,389
c. Transition Obligation/(Asset)	0	0
d. Accumulated Other Comprehensive Income	\$ 28,853,091	\$ (1,423,161)
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.73%	5.15%
b. Rate of Compensation Increase	4.32%	4.40%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 9,478,082	\$ 9,417,158
b. Interest Cost	4,851,069	5,645,607
c. Expected Return on Plan Assets	(10,714,908)	(11,306,208)
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	43,532	43,532
f. Amortization of Net (Gain)/Loss	<u>6,342,770</u>	<u>2,496,917</u>
g. Net Periodic Benefit Cost	\$ 10,000,545	\$ 6,297,006
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (30,230,284)	\$ (27,735,803)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(6,342,770)	(2,496,917)
d. Amortization of Prior Service (Cost)/Credit	(43,532)	(43,532)
e. Amortization of Transition (Obligation)/Asset	<u>0</u>	<u>0</u>
f. Total Recognized in Other Comprehensive Income	\$ (36,616,586)	\$ (30,276,252)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ (26,616,041)	\$ (23,979,246)
9. Accumulated Benefit Obligation	\$ 218,510,627	\$ 161,273,245

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 5,425,621
2. Interest Cost		8,671,669
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 181,893,204	
b. Expected distributions, weighted for timing	(4,047,806)	
c. Expected contributions, weighted for timing	<u>6,221,042</u>	
d. Expected Return Basis	\$ 184,066,440	
e. Long-term rate of return	4.43%	
f. Expected Return on Assets [-(d) x (e)]		(8,154,143)
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		43,532
6. Amortization of Net (Gain)/Loss		<u>0</u>
7. Net Periodic Pension Cost		\$ 5,986,679

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

Division 2: Gas

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 140,751,451	\$ 132,642,621
b. Service Cost	1,710,281	1,782,086
c. Interest Cost	2,260,852	2,559,022
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	(4,837,182)	(30,992,170)
f. Benefits Paid	<u>(7,242,781)</u>	<u>(7,208,686)</u>
g. Benefit Obligation at End of Year	\$ 132,642,621	\$ 98,782,873
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 102,082,957	\$ 116,569,928
b. Return on Plan Assets	18,336,631	(10,466,921)
c. Employer Contributions	3,393,121	2,891,223
d. Benefits Paid	<u>(7,242,781)</u>	<u>(7,208,686)</u>
e. Fair Value of Plan Assets at End of Year	\$ 116,569,928	\$ 101,785,544
3. Funded Status [2(e) - 1(g)]	\$ (16,072,693)	\$ 3,002,671
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 3,002,671
b. Current Liabilities	0	0
c. Noncurrent Liabilities	<u>(16,072,693)</u>	<u>0</u>
d. Funded Status	\$ (16,072,693)	\$ 3,002,671
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 49,053,676	\$ 33,058,507
b. Prior Service Cost/(Credit)	0	0
c. Transition Obligation/(Asset)	<u>0</u>	<u>0</u>
d. Accumulated Other Comprehensive Income	\$ 49,053,676	\$ 33,058,507
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.73%	5.15%
b. Rate of Compensation Increase	4.32%	4.40%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 1,710,281	\$ 1,782,086
b. Interest Cost	2,260,852	2,559,022
c. Expected Return on Plan Assets	(5,868,211)	(5,863,480)
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	0	0
f. Amortization of Net (Gain)/Loss	3,593,841	1,333,400
g. Net Periodic Benefit Cost	\$ 1,696,763	\$ (188,972)
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (17,305,602)	\$ (14,661,769)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(3,593,841)	(1,333,400)
d. Amortization of Prior Service (Cost)/Credit	0	0
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ (20,899,443)	\$ (15,995,169)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ (19,202,680)	\$ (16,184,141)
9. Accumulated Benefit Obligation	\$ 125,235,680	\$ 94,876,461

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 1,085,406
2. Interest Cost		4,693,217
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 101,785,544	
b. Expected distributions, weighted for timing	(3,912,840)	
c. Expected contributions, weighted for timing	<u>1,565,417</u>	
d. Expected Return Basis	\$ 99,438,121	
e. Long-term rate of return	4.43%	
f. Expected Return on Assets [-(d) x (e)]		(4,405,109)
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		0
6. Amortization of Net (Gain)/Loss		<u>0</u>
7. Net Periodic Pension Cost		\$ 1,373,514

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

Division 4: Manufacturing

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 28,734,836	\$ 26,020,027
b. Service Cost	0	0
c. Interest Cost	428,277	468,271
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	(1,460,606)	(6,096,281)
f. Benefits Paid	(1,682,480)	(1,582,755)
g. Benefit Obligation at End of Year	\$ 26,020,027	\$ 18,809,262
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 20,840,546	\$ 22,867,104
b. Return on Plan Assets	3,289,942	(2,151,955)
c. Employer Contributions	419,096	248,607
d. Benefits Paid	(1,682,480)	(1,582,755)
e. Fair Value of Plan Assets at End of Year	\$ 22,867,104	\$ 19,381,001
3. Funded Status [2(e) - 1(g)]	\$ (3,152,923)	\$ 571,739
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 571,739
b. Current Liabilities	0	0
c. Noncurrent Liabilities	(3,152,923)	0
d. Funded Status	\$ (3,152,923)	\$ 571,739
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 10,530,684	\$ 7,461,475
b. Prior Service Cost/(Credit)	162,419	129,935
c. Transition Obligation/(Asset)	0	0
d. Accumulated Other Comprehensive Income	\$ 10,693,103	\$ 7,591,410
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.73%	5.15%
b. Rate of Compensation Increase	4.32%	4.40%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 0	\$ 0
b. Interest Cost	428,277	468,271
c. Expected Return on Plan Assets	(1,183,823)	(1,136,685)
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	32,484	32,484
f. Amortization of Net (Gain)/Loss	<u>733,693</u>	<u>261,568</u>
g. Net Periodic Benefit Cost	\$ 10,631	\$ (374,362)
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (3,566,725)	\$ (2,807,641)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(733,693)	(261,568)
d. Amortization of Prior Service (Cost)/Credit	(32,484)	(32,484)
e. Amortization of Transition (Obligation)/Asset	<u>0</u>	<u>0</u>
f. Total Recognized in Other Comprehensive Income	\$ (4,332,902)	\$ (3,101,693)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ (4,322,271)	\$ (3,476,055)
9. Accumulated Benefit Obligation	\$ 26,020,027	\$ 18,809,262

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 0
2. Interest Cost		883,751
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 19,381,001	
b. Expected distributions, weighted for timing	(839,870)	
c. Expected contributions, weighted for timing	<u>135,417</u>	
d. Expected Return Basis	\$ 18,676,548	
e. Long-term rate of return	4.43%	
f. Expected Return on Assets [-(d) x (e)]		(827,371)
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		32,484
6. Amortization of Net (Gain)/Loss		<u>0</u>
7. Net Periodic Pension Cost		\$ 88,864

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

Division 6: Steam

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 34,568,941	\$ 33,676,655
b. Service Cost	1,061,520	947,130
c. Interest Cost	670,758	759,777
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	(1,837,234)	(10,022,840)
f. Benefits Paid	(787,330)	(787,781)
g. Benefit Obligation at End of Year	\$ 33,676,655	\$ 24,572,941
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 25,071,853	\$ 29,595,957
b. Return on Plan Assets	4,049,961	(4,620,077)
c. Employer Contributions	1,261,473	1,131,778
d. Benefits Paid	(787,330)	(787,781)
e. Fair Value of Plan Assets at End of Year	\$ 29,595,957	\$ 25,319,877
3. Funded Status [2(e) - 1(g)]	\$ (4,080,698)	\$ 746,936
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 746,936
b. Current Liabilities	0	0
c. Noncurrent Liabilities	(4,080,698)	0
d. Funded Status	\$ (4,080,698)	\$ 746,936
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 2,151,449	\$ (2,063,139)
b. Prior Service Cost/(Credit)	76,953	59,049
c. Transition Obligation/(Asset)	0	0
d. Accumulated Other Comprehensive Income	\$ 2,228,402	\$ (2,004,090)
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.73%	5.15%
b. Rate of Compensation Increase	4.32%	4.40%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 1,061,520	\$ 947,130
b. Interest Cost	670,758	759,777
c. Expected Return on Plan Assets	(1,484,531)	(1,526,712)
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	17,904	17,904
f. Amortization of Net (Gain)/Loss	882,657	338,537
g. Net Periodic Benefit Cost	\$ 1,148,308	\$ 536,636
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (4,402,664)	\$ (3,876,051)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(882,657)	(338,537)
d. Amortization of Prior Service (Cost)/Credit	(17,904)	(17,904)
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ (5,303,225)	\$ (4,232,492)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ (4,154,917)	\$ (3,695,856)
9. Accumulated Benefit Obligation	\$ 30,028,529	\$ 22,567,672

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 619,539
2. Interest Cost		1,212,155
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 25,319,877	
b. Expected distributions, weighted for timing	(467,482)	
c. Expected contributions, weighted for timing	<u>612,083</u>	
d. Expected Return Basis	\$ 25,464,478	
e. Long-term rate of return	4.43%	
f. Expected Return on Assets [-(d) x (e)]		(1,128,076)
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		17,904
6. Amortization of Net (Gain)/Loss		<u>0</u>
7. Net Periodic Pension Cost		\$ 721,522

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

Division 7: West Street Chilled Water (WSCW)

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 6,963,325	\$ 7,086,590
b. Service Cost	370,430	332,861
c. Interest Cost	156,937	178,566
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	(344,722)	(2,847,945)
f. Benefits Paid	(59,380)	(50,088)
g. Benefit Obligation at End of Year	\$ 7,086,590	\$ 4,699,984
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 5,050,298	\$ 6,227,887
b. Return on Plan Assets	862,260	(1,696,052)
c. Employer Contributions	374,709	361,101
d. Benefits Paid	(59,380)	(50,088)
e. Fair Value of Plan Assets at End of Year	\$ 6,227,887	\$ 4,842,848
3. Funded Status [2(e) - 1(g)]	\$ (858,703)	\$ 142,864
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 142,864
b. Current Liabilities	0	0
c. Noncurrent Liabilities	(858,703)	0
d. Funded Status	\$ (858,703)	\$ 142,864
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 312,570	\$ (583,045)
b. Prior Service Cost/(Credit)	398	318
c. Transition Obligation/(Asset)	0	0
d. Accumulated Other Comprehensive Income	\$ 312,968	\$ (582,727)
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.73%	5.15%
b. Rate of Compensation Increase	4.32%	4.40%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 370,430	\$ 332,861
b. Interest Cost	156,937	178,566
c. Expected Return on Plan Assets	(305,656)	(327,516)
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	80	80
f. Amortization of Net (Gain)/Loss	<u>177,796</u>	<u>71,238</u>
g. Net Periodic Benefit Cost	\$ 399,587	\$ 255,229
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (901,326)	\$ (824,377)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(177,796)	(71,238)
d. Amortization of Prior Service (Cost)/Credit	(80)	(80)
e. Amortization of Transition (Obligation)/Asset	<u>0</u>	<u>0</u>
f. Total Recognized in Other Comprehensive Income	\$ (1,079,202)	\$ (895,695)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ (679,615)	\$ (640,466)
9. Accumulated Benefit Obligation	\$ 5,635,982	\$ 3,955,356

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 221,294
2. Interest Cost		238,025
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 4,842,848	
b. Expected distributions, weighted for timing	(26,507)	
c. Expected contributions, weighted for timing	<u>195,000</u>	
d. Expected Return Basis	\$ 5,011,341	
e. Long-term rate of return	4.43%	
f. Expected Return on Assets [-(d) x (e)]		(222,002)
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		80
6. Amortization of Net (Gain)/Loss		<u>0</u>
7. Net Periodic Pension Cost		\$ 237,397

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

Division 20: Water Company

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 31,515,662	\$ 32,533,141
b. Service Cost	2,510,365	2,569,159
c. Interest Cost	687,253	812,901
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	(1,809,119)	(12,676,138)
f. Benefits Paid	(371,020)	(360,956)
g. Benefit Obligation at End of Year	\$ 32,533,141	\$ 22,878,107
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 22,857,398	\$ 28,591,005
b. Return on Plan Assets	3,637,667	(7,298,552)
c. Employer Contributions	2,466,960	2,642,028
d. Benefits Paid	(371,020)	(360,956)
e. Fair Value of Plan Assets at End of Year	\$ 28,591,005	\$ 23,573,525
3. Funded Status [2(e) - 1(g)]	\$ (3,942,136)	\$ 695,418
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 695,418
b. Current Liabilities	0	0
c. Noncurrent Liabilities	(3,942,136)	0
d. Funded Status	\$ (3,942,136)	\$ 695,418
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 3,104,144	\$ (1,079,262)
b. Prior Service Cost/(Credit)	0	0
c. Transition Obligation/(Asset)	0	0
d. Accumulated Other Comprehensive Income	\$ 3,104,144	\$ (1,079,262)
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.73%	5.15%
b. Rate of Compensation Increase	4.32%	4.40%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 2,510,365	\$ 2,569,159
b. Interest Cost	687,253	812,901
c. Expected Return on Plan Assets	(1,395,682)	(1,521,222)
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	0	0
f. Amortization of Net (Gain)/Loss	804,697	327,042
g. Net Periodic Benefit Cost	\$ 2,606,633	\$ 2,187,880
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (4,051,104)	\$ (3,856,364)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(804,697)	(327,042)
d. Amortization of Prior Service (Cost)/Credit	0	0
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ (4,855,801)	\$ (4,183,406)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ (2,249,168)	\$ (1,995,526)
9. Accumulated Benefit Obligation	\$ 26,438,092	\$ 19,493,236

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 1,548,299
2. Interest Cost		1,151,507
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 23,573,525	
b. Expected distributions, weighted for timing	(236,603)	
c. Expected contributions, weighted for timing	<u>1,432,708</u>	
d. Expected Return Basis	\$ 24,769,630	
e. Long-term rate of return	4.43%	
f. Expected Return on Assets [-(d) x (e)]		(1,097,295)
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		0
6. Amortization of Net (Gain)/Loss		<u>0</u>
7. Net Periodic Pension Cost		\$ 1,602,511

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

Division 92: Wastewater

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 10,596,545	\$ 12,724,603
b. Service Cost	1,882,295	1,953,699
c. Interest Cost	226,602	313,443
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	152,464	(4,903,171)
f. Benefits Paid	(133,303)	(150,682)
g. Benefit Obligation at End of Year	\$ 12,724,603	\$ 9,937,892
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 7,685,368	\$ 11,182,726
b. Return on Plan Assets	1,929,723	(2,722,913)
c. Employer Contributions	1,700,938	1,930,840
d. Benefits Paid	(133,303)	(150,682)
e. Fair Value of Plan Assets at End of Year	\$ 11,182,726	\$ 10,239,971
3. Funded Status [2(e) - 1(g)]	\$ (1,541,877)	\$ 302,079
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 302,079
b. Current Liabilities	0	0
c. Noncurrent Liabilities	(1,541,877)	0
d. Funded Status	\$ (1,541,877)	\$ 302,079
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 1,130,680	\$ (562,610)
b. Prior Service Cost/(Credit)	0	0
c. Transition Obligation/(Asset)	0	0
d. Accumulated Other Comprehensive Income	\$ 1,130,680	\$ (562,610)
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.73%	5.15%
b. Rate of Compensation Increase	4.32%	4.40%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 1,882,295	\$ 1,953,699
b. Interest Cost	226,602	313,443
c. Expected Return on Plan Assets	(491,962)	(614,883)
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	0	0
f. Amortization of Net (Gain)/Loss	270,564	127,915
g. Net Periodic Benefit Cost	\$ 1,887,499	\$ 1,780,174
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (1,285,297)	\$ (1,565,375)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(270,564)	(127,915)
d. Amortization of Prior Service (Cost)/Credit	0	0
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ (1,555,861)	\$ (1,693,290)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ 331,638	\$ 86,884
9. Accumulated Benefit Obligation	\$ 10,248,332	\$ 8,396,130

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 1,236,736
2. Interest Cost		498,252
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 10,239,971	
b. Expected distributions, weighted for timing	(115,191)	
c. Expected contributions, weighted for timing	<u>1,045,417</u>	
d. Expected Return Basis	\$ 11,170,197	
e. Long-term rate of return	4.43%	
f. Expected Return on Assets [-(d) x (e)]		(494,840)
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		0
6. Amortization of Net (Gain)/Loss		<u>0</u>
7. Net Periodic Pension Cost		\$ 1,240,148

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).



CITIZENS ENERGY GROUP RETIREMENT PLAN

ACTUARIAL VALUATION

AS OF

OCTOBER 1, 2022



Rudd and Wisdom, Inc.

Rudd and Wisdom, Inc.

CONSULTING ACTUARIES

Mitchell L. Bilbe, F.S.A.
Evan L. Dial, F.S.A.
Philip S. Dial, F.S.A.
Charles V. Faerber, F.S.A., A.C.A.S.
Mark R. Fenlaw, F.S.A.
Brandon L. Fuller, F.S.A.
Shannon R. Hatfield, F.S.A.

Christopher S. Johnson, F.S.A.
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Raymond W. Tilotta
Ronald W. Tobleman, F.S.A.
David G. Wilkes, F.S.A.

October 28, 2022

PERSONAL AND CONFIDENTIAL

Mr. Phil Zbojnowicz
Director of Accounting Services
Citizens Energy Group
2020 North Meridian Street
Indianapolis, Indiana 46202

Re: Actuarial Valuation as of October 1, 2022

Dear Phil:

Enclosed is the Actuarial Valuation of the Citizens Energy Group Retirement Plan as of October 1, 2022. The purpose of this report is to evaluate the funded status of the plan and to determine an actuarially reasonable contribution level for the fiscal year beginning October 1, 2022 that comports with the employer's funding policy.

Note: This report may be provided to third parties only if distributed in its entirety.

Funding Policy

The ultimate goal of a funding policy is to ensure that plan assets will be sufficient to pay all benefits to all plan participants and their beneficiaries as payments come due. A funding policy that requires contributions that are sufficient to pay the plan's Normal Cost and to amortize the plan's Unfunded Accrued Liability (UAL) over a reasonable period of time should be adequate to achieve this goal, subject to the risks inherent in any pension plan as further discussed below.

Citizens Energy Group has utilized a funding policy that determines the Normal Cost using the Frozen Initial Liability (FIL) funding method, where such method uses the Entry Age Normal (EAN) funding method to determine the Frozen Initial Accrued Liability, which is reestablished whenever plan provisions or actuarial assumptions are changed. The UAL is the difference between this Frozen Initial Accrued Liability and the Actuarial Value of Plan Assets as of the valuation date. The employer's funding policy requires a contribution that funds the sum of the Normal Cost under the FIL funding method and a level dollar amortization of the UAL over an open 15-year period.

The annual contribution reflecting the continued utilization of this funding policy for the 2023 fiscal year is \$22,454,911. As shown in the table below, the current year contribution has increased 8.5% over the prior year contribution.

Summary of Employer's Contribution Amount Under Funding Policy		
	FY 2021-2022	FY 2022-2023
Annual Employer Contribution	\$ 20,689,791	\$ 22,454,911

The primary reason for the increase in the contribution amount is due to investment losses during the 12 months ending September 30, 2022. During this period, the trust's investment return was approximately -16% or roughly a loss of \$70M on beginning of year assets of \$433M. (See page IV-2 for additional details.) These investment losses are amortized into the employer's contribution over a 15-year period and thus increase the contribution materially. However, this increase was partially offset by changes in the assumed segment interest rates used to discount the plan's liability. (See page II-6 for a summary of how the assumption changes affect the liability and the employer contribution.)

Action Items

The following list contains certain action items for company management:

1. Review the Management Summary (Section II) of this report.
2. Make a contribution of \$22,454,911 to the trust for the twelve months ending September 30, 2023 in order to follow the employer's funding policy.
3. Notify us of any activities during the remainder of the 2022-2023 fiscal year that could require updates to the next valuation on October 1, 2023 (e.g., plan amendment or a change in the investment policy).

Variability in Future Actuarial Measurement and Related Risks

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- Plan experience differing from that anticipated by the current economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements;
- Changes in economic or demographic assumptions; and
- Changes in plan provisions.

Risks that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- Investment Risk (i.e., the potential that investment returns will be different than expected);

Adverse investment experience can increase future employer contribution requirements in future years. Favorable investment experience can have the opposite effect.

- Asset/Liability mismatch (i.e., the potential that changes in asset values are not matched by changes in the value of liabilities);

Mismatches can produce effects similar to adverse investment experience, but they can be amplified by assets and liabilities moving in opposite directions. This plan's assets are not matched to its liabilities. Instead, the employer has elected to invest with an asset mix intended to produce higher long-term returns on average than might be expected with an asset/liability matched portfolio, but this will frequently produce short term variances between asset growth and liability growth.

- Interest rate risk (i.e., the potential that interest rates will be different than expected);

Interest rate fluctuations can cause volatility in the plan liabilities and the employer contributions. Because the employer utilizes a mark-to-market approach in selecting the segmented interest rates used to discount the plan liabilities, this type of volatility can be expected.

- Longevity and other demographic risks (i.e., the potential that mortality or other demographic experience will be different than expected);

Adverse longevity and other demographic experience can increase future employer contribution requirements in future years. Favorable demographic experience can have the opposite effect.

- Contribution risk (i.e., the potential that actual future contributions deviate from expected future contributions).

If employer contributions are made below the level required by the funding policy contemplated in this valuation, the employer contribution requirements will grow in the future, compounded with interest.

We can provide more detailed assessments of one or more of the above risks upon request. Assessment methods may include, but are not limited to, scenario tests and sensitivity tests. We have not been asked to perform and have not performed any stochastic or deterministic sensitivity analyses of the potential ranges of such future measurements, nor any of the more detailed assessments described above. If you have an interest in the results of any such analysis, please let us know.

Mr. Phil Zbojniewicz

Page 4

October 28, 2022

If you have any questions concerning this information, please do not hesitate to call or write.

Respectfully submitted,

RUDD AND WISDOM, INC.

A handwritten signature in black ink, appearing to read "Mitchell L. Bilbe".

Mitchell L. Bilbe, F.S.A.

A handwritten signature in black ink, appearing to read "Christopher S. Johnson".

Christopher S. Johnson, F.S.A.

MLB/CSJ:ph

Enclosures

cc: Adrianne Bowers

Russ Clemens

Craig Jackson

Camela Johnson

Sabine Karner

Jodi Whitney

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ACTUARIAL VALUATION**AS OF****OCTOBER 1, 2022**

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Section I – Certification of Actuarial Valuation as of October 1, 2022

At the request of Citizens Energy Group, we have performed an actuarial valuation of the Citizens Energy Group Retirement Plan as of October 1, 2022. The purpose of this report is to evaluate the funded status of the plan and to determine an actuarially reasonable contribution level for the fiscal year beginning October 1, 2022 that comports with the employer's funding policy.

We have based our valuation on employee data as of October 1, 2022 (excluding new active participants between January 1, 2022 and September 30, 2022 and including as active participants those who terminated non-vested between January 1, 2022 and September 30, 2022) provided by Ms. Adrienne Bowers and asset information for the October 1, 2021 to September 30, 2022 fiscal year provided by Wells Fargo/Principal. We have used the actuarial methods and assumptions described in Section V of this report. The actuarial valuation has been performed on the basis of the plan benefits described in Section VI.

To the best of our knowledge, no material biases exist with respect to any imperfections in the census data provided. We have not audited the data provided but have reviewed it for reasonableness and consistency relative to previously provided information. We have utilized software licensed from Winklevoss Technologies, LLC in the development of the liabilities summarized in the report.

All current employees eligible to participate in the plan as of the valuation date and all other individuals who have a current or deferred vested benefit under the plan have been included in the valuation. Further, all plan benefits have been considered in the development of plan costs.

To the best of our knowledge, the actuarial information supplied in this report is complete and accurate. In our opinion the assumptions used, in the aggregate and individually, are reasonably related to the experience of the plan and to reasonable expectations. The assumptions represent a reasonable estimate of anticipated experience of the plan over the long-term future, and their selection complies with the applicable actuarial standards of practice. We are neither aware of any material inconsistencies among the assumptions, nor are we aware of any unreasonable results caused by the aggregation of the assumptions.

We hereby certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.



Mitchell L. Bilbe, F.S.A.
Enrolled Actuary Number 20-6302
Member of American Academy of Actuaries



Christopher S. Johnson, F.S.A.
Enrolled Actuary Number 20-7100
Member of American Academy of Actuaries



Brandon L. Fuller, F.S.A.
Enrolled Actuary Number 20-8409
Member of American Academy of Actuaries

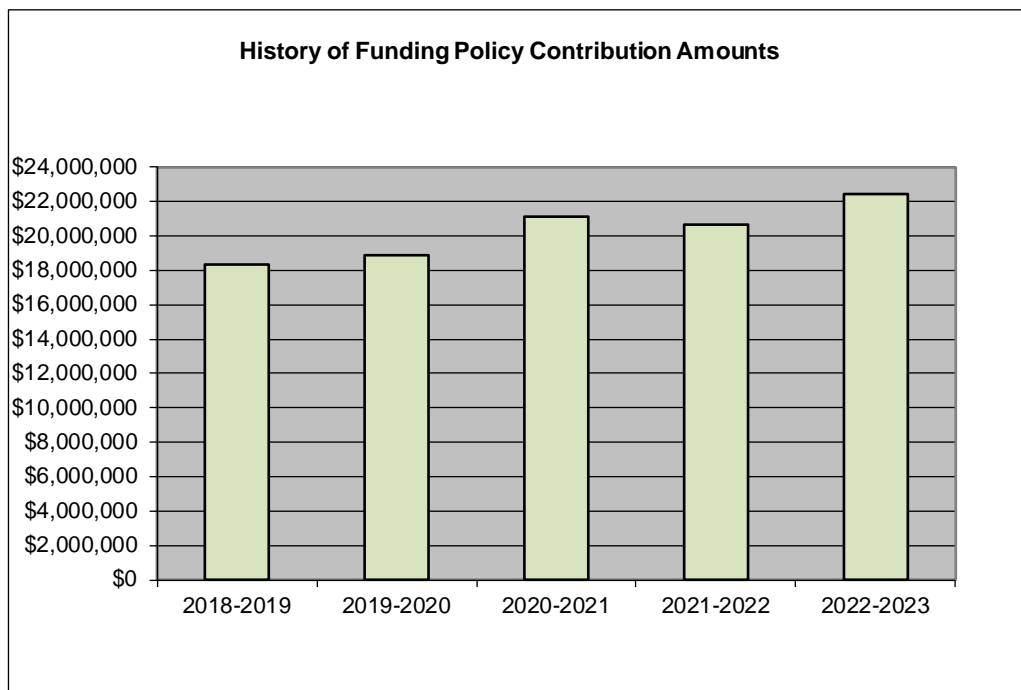
Section II – Management Summary

All employer liabilities presented throughout this report have been determined based upon the actuarial methods and assumptions outlined in Section V and the plan provisions outlined in Section VI.

A. Contribution Amount Under Employer’s Funding Policy

Division No.	Division	Annual Contribution	
		FY 2021-2022	FY 2022-2023
1	Corporate Shared Services	\$ 11,484,214	\$ 11,783,049
2	Gas	2,891,223	3,697,509
4	Manufacturing	248,607	418,233
6	Steam	1,131,778	1,351,229
7	West Street Chilled Water	361,101	399,800
20	Water Company	2,642,028	2,901,865
92	Wastewater	1,930,840	1,903,226
	Total	\$ 20,689,791	\$ 22,454,911

The employer’s Funding Policy determines the annual contribution amount as the sum of the **Normal Cost** and a 15-year amortization of the **Unfunded Accrued Liability** (UAL), where the UAL is the difference between the **Actuarial Value of Assets** and the **Actuarial Accrued Liability** (AAL). The AAL is determined using the **Entry Age Normal** (EAN) actuarial funding method. The Normal Cost is determined using the Frozen Initial Liability funding method as described in Section V.A. of this report. A 5-year history of the plan’s contribution amounts under the employer’s Funding Policy is shown below.



B. Participant Demographics as of October 1, 2022

Participants	Number	Estimated Payroll for 2022-2023
Actives	1,020	\$ 91,155,652
Vested Terminated	229	N/A
Retirees and Beneficiaries	950	N/A
Total	2,199	\$ 91,155,652

C. Funding Liabilities and Assets

	As of October 1, 2021	As of October 1, 2022
1. a. Market Value of Assets	\$ 433,322,669	\$ 367,035,970
b. Actuarial Value of Assets	\$ 433,322,669	\$ 367,035,970
2. Effective Discount Rate	3.10%	3.48%
3. Present Value of Accrued Benefits		
a. Actives	\$ 184,564,724	\$ 168,970,043
b. Vested Terminated	22,771,890	23,644,280
c. Retirees and Beneficiaries	<u>218,896,024</u>	<u>218,751,478</u>
d. Total	\$ 426,232,638	\$ 411,365,801
e. Funded Status [1.b./3.d.]	101.7%	89.2%
4. Entry Age Normal Accrued Liabilities		
a. Actives	\$ 248,933,859	\$ 225,467,656
b. Vested Terminated	22,771,890	23,644,280
c. Retirees and Beneficiaries	<u>218,896,024</u>	<u>218,751,478</u>
d. Total	\$ 490,601,773	\$ 467,863,414
e. Funded Status [1.b./4.d.]	88.3%	78.4%
5. Present Value of Future Benefits		
a. Actives	\$ 403,215,869	\$ 358,895,852
b. Vested Terminated	22,771,890	23,644,280
c. Retirees and Beneficiaries	<u>218,896,024</u>	<u>218,751,478</u>
d. Total	\$ 644,883,783	\$ 601,291,610
e. Funded Status [1.b./5.d.]	67.2%	61.0%

1. Liabilities

The **Present Value of Accrued Benefits (PVAB)** is the actuarial present value of all accrued benefits (i.e., all benefits attributed by the pension benefit formula to employee service and compensation rendered prior to the valuation date).

The **Present Value of Future Benefits (PVFB)** is the actuarial present value of the cost to finance projected benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

The **Entry Age Normal Accrued Liability** attributes a portion of the PVFB to the past service of each individual, where the amount attributed to each year is spread on a level basis over the earnings of an individual from their plan entry date to their assumed exit dates from the plan.

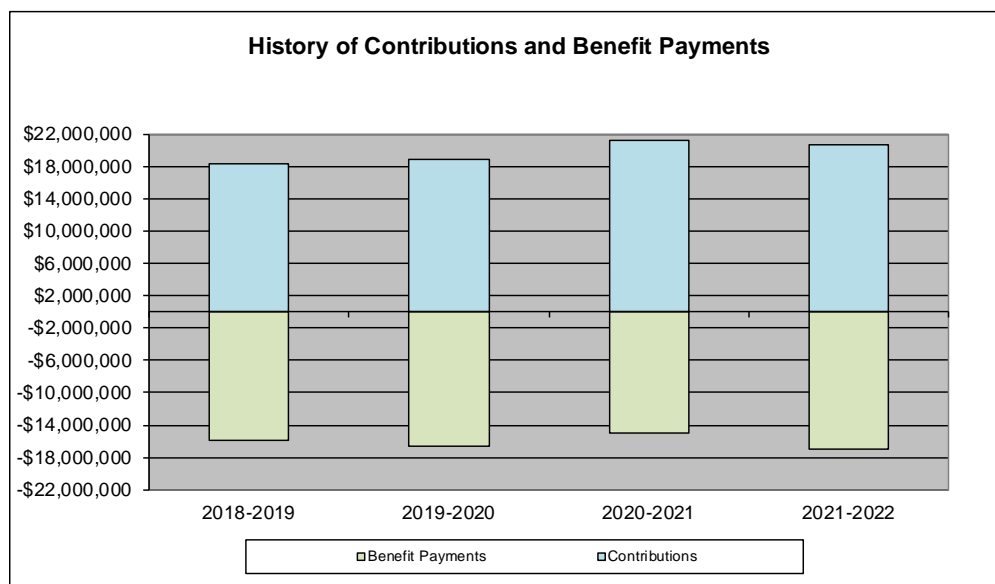
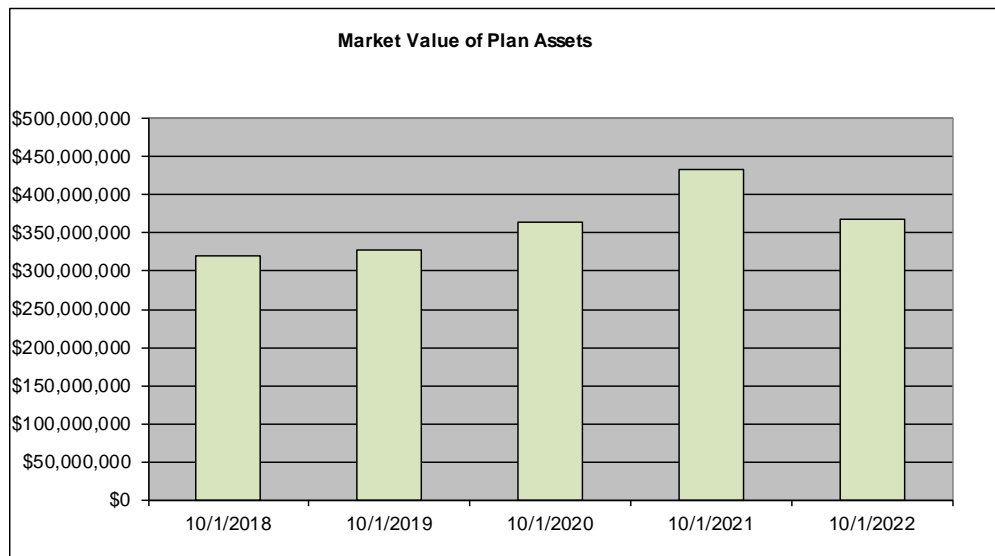
The liability measurements in this report are not appropriate for assessing the sufficiency of plan assets to cover the cost of settling plan obligations in the event the plan is terminated.

Further, additional contributions from the employer could be needed in the future even if asset values are equal to 100% of liabilities as measured for funding purposes.

2. Assets

The **Actuarial Value of Assets (AVA)** is equal to the market value of assets, including any receivable contributions made for a prior fiscal year after the valuation date. As of October 1, 2021 the AVA was \$433,322,669, and as of October 1, 2022 the AVA is \$367,035,970.

Below is a 5-year history of the market value of plan assets. In addition to investment return, asset values fluctuate from year-to-year based on the amount of contributions and benefit payments during the year. This information is also shown below.

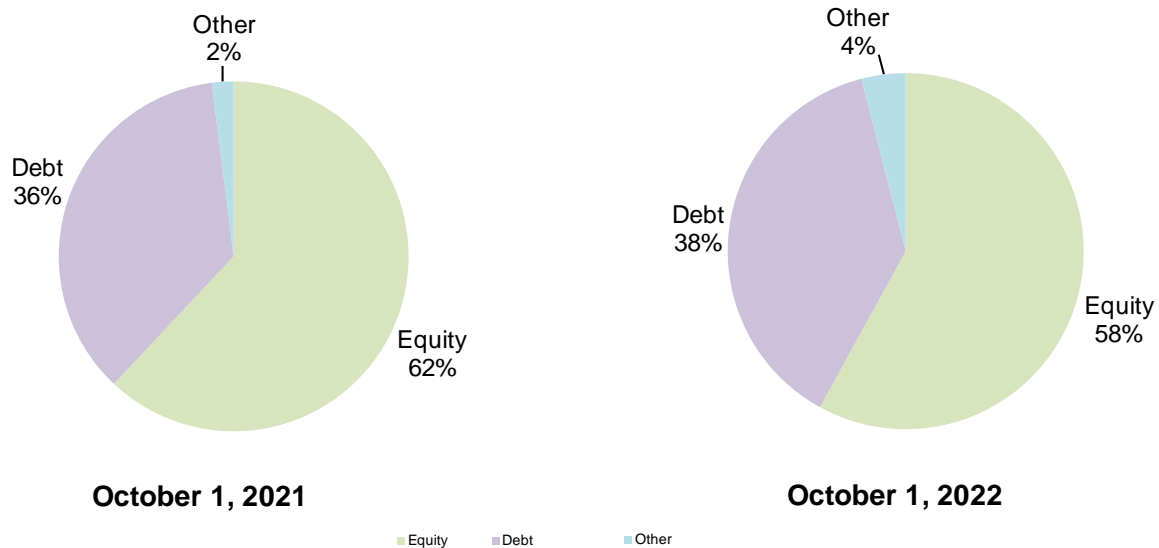


It is our understanding that the investment policy's targeted weighted-average asset allocations by asset class are as follows:

Investment Policy Targeted Asset Allocations	
Asset Class	Target Allocation
Equity Securities	60%
Debt Securities	40%
Cash and Cash Equivalents	0%
Other	0%
Total	100%

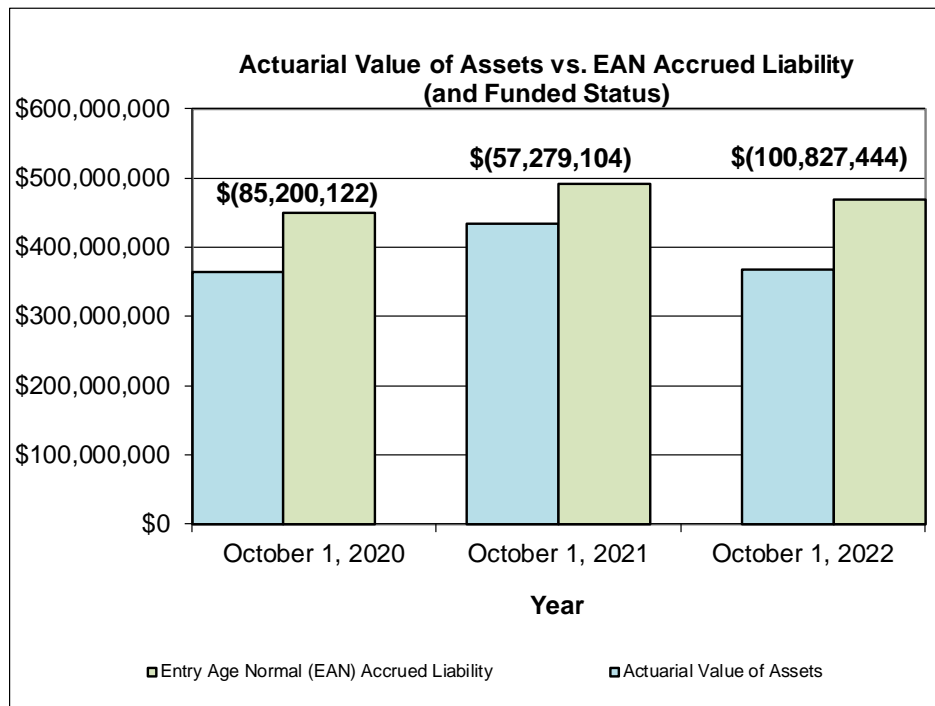
The target asset allocation above should be reviewed periodically against actual asset allocations as shown below. Furthermore, from time to time the plan's investment policy itself should be reviewed to ensure that the objectives stated in the policy are consistent with the plan sponsor's investment goals and risk tolerance, particularly as the plan approaches the point at which the value of plan assets equals or exceeds PVFB.

Asset Allocation as of Prior and Current Valuation Dates



D. Funded Status Based on Entry Age Normal Accrued Liability

The **Funded Status** compares a measure of a plan's liabilities to its assets. The graph below compares the Actuarial Value of Assets to the EAN Accrued Liability for each of the last three years. The corresponding Funded Status is shown above each year's column.



E. No Changes in Plan Provisions

This valuation reflects identical plan provisions to those recognized in the prior valuation prepared for the plan. Plan provisions are summarized in Section VI.

F. Changes in Actuarial Assumptions

The mortality projection assumption was updated to reflect the MP-2021 projection scale recently published by the Society of Actuaries. Interest rates were updated to the October 2022 segment rates published by the IRS. Actuarial methods and assumptions are summarized in Section V.

Approximate Effect of Assumption Changes	Normal Cost (\$ Thousands)	Annual Contribution (\$ Thousands)
1. October 1, 2022 before assumption changes:	\$ 14,403	\$ 25,347
2. Effect of Change in Segment Rates ¹ :	(1,177)	(3,026)
3. Effect of Change in Mortality Assumptions:	26	134
4. October 1, 2022 after assumption changes:	\$ 13,252	\$ 22,455

¹ From 1.01%/2.65%/3.34% to 1.57%/3.21%/3.66%.

G. Plan Maturity Measures

The following measures may help the employer assess the relative risks associated with a particular asset mix for the trust's portfolio, a particular funding policy, whether to consider or reconsider asset/liability matching for all or a portion of the portfolio, and other risks disclosed in the transmittal letter to this report.

Measure	Calculation	Result
1. Ratio of Retired Life Accrued Liability to Total Accrued Liability	$\frac{218,751,478}{467,863,414}$	46.8%
2. Ratio of Expected Annual Benefit Payments to Market Value of Assets	$\frac{17,809,132}{367,035,970}$	4.9%
3. Ratio of Expected Annual Benefit Payments to Expected Annual Contributions	$\frac{17,809,132}{22,454,911}$	79.3%
4. Duration of Accrued Liability ¹	$[1 - \frac{467,863,414}{483,737,101}] / (0.0025)$	13.1

¹ Modified duration of the plan's Accrued Liability (AL) estimated by examining the impact of a 25 basis point shift in discount rates on AL. We used the following formula for this purpose:

$$[1 - (\frac{AL_1}{AL_2})] / (i_1 - i_2)$$

Section III – Detailed Actuarial Valuation Results

A. Total Plan Results: Determination of Employer Contribution

	October 1, 2021	October 1, 2022
1. Participant Census at Valuation Date		
a. Actives	1,048	1,020
b. Vested terminated deferred benefit	210	229
c. Retirees and beneficiaries in pay status	<u>932</u>	<u>950</u>
d. Total	2,190	2,199
2. Projected Participant Compensation for Fiscal Year Following the Valuation Date	\$ 94,396,769	\$ 91,155,652
3. Present Value of Future Benefits		
a. Active participants	\$ 403,215,869	\$ 358,895,852
b. Vested terminated deferred benefit	22,771,890	23,644,280
c. Retirees and beneficiaries in pay status	<u>218,896,024</u>	<u>218,751,478</u>
d. Total	\$ 644,883,783	\$ 601,291,610
4. Accrued Liability	\$ 490,601,773	\$ 467,863,414
5. Actuarial Value of Assets	\$ 433,322,669	\$ 367,035,970
6. Unfunded Accrued Liability (UAL) (Item 4. – Item 5.)	\$ 57,279,104	\$ 100,827,444
7. Present Value of Future Normal Cost (Item 3.d. – Item 4.)	\$ 154,282,010	\$ 133,428,196
8. Present Value of Future Salaries	\$ 946,917,259	\$ 917,814,932
9. Normal Cost Percentage (Item 7. ÷ Item 8.)	16.2931%	14.5376%
10. Normal Cost (Item 2. x Item 9.)	\$ 15,380,160	\$ 13,251,844
11. Funding Policy Annual Contribution		
a. Normal Cost (Item 10.)	\$ 15,380,160	\$ 13,251,844
b. Amortization Period	15	15
c. Level Dollar Amortization of UAL ¹	\$ 4,687,533	\$ 8,447,915
d. Interest for one year ¹	\$ 622,098	\$ 755,152
e. Total Funding Policy Annual Contribution (Item 11.a. + Item 11.c. + Item 11.d.)	\$ 20,689,791	\$ 22,454,911
12. Effective Discount Rate	3.10%	3.48%

¹ Determined using Effective Discount Rate.

B. Results by Division: Determination of Employer Contribution

	Corporate	Gas	Manufacturing	Steam	WSCW	Water	Wastewater	Total
1. Participant Census at Valuation Date								
a. Actives	525	108	0	54	22	170	141	1,020
b. Vested terminated deferred benefit	126	19	61	11	0	8	4	229
c. Retirees and beneficiaries in pay status	<u>319</u>	<u>363</u>	<u>151</u>	<u>58</u>	<u>6</u>	<u>35</u>	<u>18</u>	<u>950</u>
d. Total	970	490	212	123	28	213	163	2,199
2. Projected Participant Compensation for Fiscal Year Following the Valuation Date	\$ 48,573,375	\$ 9,450,312	\$ 0	\$ 5,023,188	\$ 1,813,345	\$ 15,302,544	\$ 10,992,888	\$ 91,155,652
3. Present Value of Future Benefits								
a. Active participants	\$ 192,637,041	\$ 51,364,849	\$ 0	\$ 26,428,445	\$ 9,149,721	\$ 50,359,053	\$ 28,956,743	\$ 358,895,852
b. Vested terminated deferred benefit	15,066,227	2,096,370	5,112,340	810,720	0	459,525	99,098	23,644,280
c. Retirees and beneficiaries	<u>97,028,191</u>	<u>83,507,934</u>	<u>17,271,323</u>	<u>11,723,294</u>	<u>568,316</u>	<u>6,019,929</u>	<u>2,632,491</u>	<u>218,751,478</u>
d. Total	\$ 304,731,459	\$ 136,969,153	\$ 22,383,663	\$ 38,962,459	\$ 9,718,037	\$ 56,838,507	\$ 31,688,332	\$ 601,291,610
4. Accrued Liability	\$ 239,549,007	\$ 121,802,665	\$ 22,383,663	\$ 31,874,472	\$ 6,797,514	\$ 32,102,433	\$ 13,353,660	\$ 467,863,414
5. Actuarial Value of Assets	\$ 187,924,723	\$ 95,553,441	\$ 17,559,846	\$ 25,005,327	\$ 5,332,608	\$ 25,184,161	\$ 10,475,864	\$ 367,035,970
6. Unfunded Accrued Liability (UAL) (Item 4. – Item 5.)	\$ 51,624,284	\$ 26,249,224	\$ 4,823,817	\$ 6,869,145	\$ 1,464,906	\$ 6,918,272	\$ 2,877,796	\$ 100,827,444
7. Normal Cost Percentage (See Page III-1.)	14.5376%	14.5376%	14.5376%	14.5376%	14.5376%	14.5376%	14.5376%	14.5376%
8. Normal Cost (Item 2. x Item 7.)	\$ 7,061,402	\$ 1,373,849	\$ 0	\$ 730,251	\$ 263,617	\$ 2,224,623	\$ 1,598,102	\$ 13,251,844
9. Recommended Annual Contribution								
a. Normal Cost (Item 8.)	\$ 7,061,402	\$ 1,373,849	\$ 0	\$ 730,251	\$ 263,617	\$ 2,224,623	\$ 1,598,102	\$ 13,251,844
b. Level Dollar Amortization of UAL ^{1,2}	4,325,386	2,199,314	404,168	575,537	122,738	579,653	241,119	8,447,915
c. Interest for one year ²	<u>396,261</u>	<u>124,346</u>	<u>14,065</u>	<u>45,441</u>	<u>13,445</u>	<u>97,589</u>	<u>64,005</u>	<u>755,152</u>
d. Total Recommended Annual Contribution	\$ 11,783,049	\$ 3,697,509	\$ 418,233	\$ 1,351,229	\$ 399,800	\$ 2,901,865	\$ 1,903,226	\$ 22,454,911

¹ Amortized over a 15-year period.

² Determined using Effective Discount Rate of 3.48%.

Section IV – Summary of Assets

A. Summary of Assets as of October 1, 2022

Investment Category	Market Value
1. Cash	\$ 0
2. Cash equivalents	13,273,058
3. Receivables	
a. Employer Contributions	0
b. Employee Contributions	0
c. Accrued Income	0
4. U.S. Government securities	0
5. Corporate debt and equity	0
6. Pooled or Mutual Funds	
a. Cash equivalents	0
b. Debt	139,436,404
c. Equity	214,312,864
7. Real estate and mortgages	0
8. Unallocated insurance contracts	0
9. Other	
a. Accrued Income	13,644
b. Benefits receivable/(payable)	0
10. Total assets as of October 1, 2022	\$ 367,035,970
11. Actuarial value of assets as of October 1, 2022	\$ 367,035,970

**B. Statement of Changes in Assets for the Fiscal Year
October 1, 2021 – September 30, 2022**

	10/01/2021 - 09/30/2022
Additions	
1. Employer Contributions	\$ 20,689,791
2. Investment Income	
a. Interest and dividends	\$ 6,465,644
b. Net appreciation in fair value	(76,408,074)
c. Total	\$ (69,942,430)
3. Other Deposits	\$ 30,904
4. Total Additions [1. + 2.c. + 3.]	\$ (49,221,735)
Deductions	
5. Benefit Payments	\$ 16,978,349
6. Expenses	\$ 45,513
7. Aetna Premiums	\$ 41,102
8. Total Deductions [5. + 6. + 7.]	\$ 17,064,964
9. Net Increase in Assets [4. - 8.]	\$ (66,286,699)
10. Market Value of Assets (Plan Net Position)	
a. Beginning of Year	\$ 433,322,669
b. End of Year [10.a. + 9.]	\$ 367,035,970
11. Rate of Return Net of Investment-Related Expenses	(16.1)%

Section V – Actuarial Methods and Assumptions

A. Actuarial Methods

1. Actuarial Funding Method

The Frozen Initial Liability actuarial funding method is used in developing the contribution requirements for the plan. The actuarial funding method is the procedure by which the actuary annually identifies a series of annual contributions which, along with current assets and future investment earnings, will fund the expected plan benefits. The Frozen Initial Liability funding method compares the excess of the present value of expected future plan benefits over the current value of plan assets. This difference represents the expected present value of current and future contributions that will be paid into the plan. The contributions are divided into two components: an annual Normal Cost (or current cost) and an annual amortization charge for the Unfunded Frozen Initial Liability.

The Unfunded Frozen Initial Liability is determined at the time that the plan is established. When the Unfunded Frozen Initial Liability is determined, it is set equal to the excess of the plan's accrued liability over the value of current plan assets. This Accrued Liability is determined under the Individual Entry Age Normal actuarial funding method and is the excess of the plan's present value of future benefits over the present value of remaining individual active participant level percent of compensation contributions. These individual contributions are the amounts which, if contributed throughout a participant's employment, would fund each active participant's expected benefits. Before any changes in plan benefits or actuarial assumptions are made, the Unfunded Frozen Initial Liability is based on an expected (projected) Unfunded Accrued Liability. Whenever changes in plan benefits or actuarial assumptions are made, the Unfunded Frozen Initial Liability is reestablished at a level equal to Unfunded Entry Age Normal Accrued Liability determined after the changes are reflected. The Unfunded Frozen Initial Liability is amortized in level dollar annual contributions in accordance with employer funding goals which take IRS guidelines into consideration.

The plan's Normal Cost is the current contribution in a series of annual amounts which represent the excess of the Present Value of Future Benefits over the Actuarial Value of Assets and the Unfunded Frozen Initial Liability. The Normal Cost has been calculated to be a level percent per year of active participant compensation and is determined on an aggregate (average) basis for all active participants. Experience gains and losses do not affect the Unfunded Frozen Initial Liability, rather they are included in the Present Value of Future Normal Costs.

2. Actuarial Value of Assets

Fair value is equal to the market value of assets as determined by the plan trustee, including any receivable contributions made for a prior fiscal year after the asset valuation date, and net of any payable expenses.

Actuarial Value of Assets equals fair value.

B. Actuarial Assumptions

1. **Mortality:** The active, vested terminated and retired participants of the plan are expected to exhibit mortality in accordance with the following published mortality tables:

- a. Pre-retirement Mortality: Pri-2012 Total Dataset Employee Table projected from the 2012 base year using Scale MP-2021 mortality improvement rates
- b. Post-retirement Mortality:
 - i. Retired Participants: Pri-2012 Total Dataset Retiree Table projected from the 2012 base year using Scale MP-2021 mortality improvement rates
 - ii. Contingent Annuitants of Retired Participants: Pri-2012 Total Dataset Retiree Table prior to Retired Participant death and Contingent Survivor Table after Retired Participant death projected from the 2012 base year using Scale MP-2021 mortality improvement rates

Rationale: This assumption reflects the Society of Actuaries' most recent study (and updates thereto) on mortality which reflects current trends in mortality and expected mortality improvements.

2. **Termination:** The active participants are assumed to terminate their employment for causes other than death, disability or retirement in accordance with the sample annual rates as illustrated below.

Attained Age	Terminations per 1,000 Participants	
	Corporate Employees	Non-Corporate Employees
20	250	250
25	175	150
30	125	50
35	88	50
40	81	50
45	75	45
50	58	40
55	40	35
60+	40	35

Rationale: This assumption is based upon the actuary's review of recent termination experience in this plan, adjusted for future expectations. The experience study was completed in September 2019.

3. Interest Rates:

October 2022 Segment Rates	
1 st Segment Rate	1.57%
2 nd Segment Rate	3.21%
3 rd Segment Rate	3.66%

Effective Rate (Equivalent Single Discount Rate)
3.48%

- 4. Earnings Progression:** The increase in the levels of participant compensation is assumed to increase in accordance with the annual rates¹ shown below:

Attained Age	Corporate Employees	Non-Corporate Employees
< 30	7.75%	8.00%
30-34	6.50%	5.50%
35-39	5.50%	4.75%
40-44	5.50%	4.50%
45-49	5.50%	4.25%
50-54	4.25%	4.00%
55+	4.00%	3.75%

¹ Includes assumed inflation.

Rationale: This assumption is based on the actuary's review of recent earnings experience, adjusted for assumed inflation. This assumption was evaluated in an experience study which was completed in September 2019.

- 5. Retirement Age:** A participant is assumed to retire in accordance with the annual rates as illustrated below.

- a. For Reduced Benefit Annuitants who are eligible for early commencement but do not meet the Rule of 85:

Age	Retirements Per 1,000 Eligible Participants	
	Corporate Employees	Non-Corporate Employees
45-59	40	25
60	200	50
61	50	50
62	200	100
63	200	250
64	200	150

- b. For Unreduced Benefit Retirees who meet the Rule of 85 or have reached Normal Retirement Age:

Age	Retirements Per 1,000 Eligible Participants															
	Years of Service															
	≤20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	≥35
55											200	200	200	200	200	200
56										250	250	130	130	130	130	130
57									300	300	150	150	150	150	150	150
58								350	350	180	180	180	180	180	180	180
59							400	400	200	200	200	200	200	200	200	200
60						400	400	200	200	200	200	200	200	200	200	200
61					400	400	200	200	200	200	200	200	200	200	200	200
62				400	400	200	200	200	200	200	200	200	200	200	200	200
63			400	400	200	200	200	200	200	200	200	200	200	200	200	200
64		400	400	200	200	200	200	200	200	200	200	200	200	200	200	200
65	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
66	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
67	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
68	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
69	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
70	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Rationale: This assumption is based on the actuary's review of recent retirement experience in this plan, adjusted for future expectations. The experience study was completed in September 2019.

6. ***Social Security Taxable Wage Base Increase:*** The benefits of this plan are determined, in part, by 35-year averages of the Social Security Taxable Wage Base. The Social Security Taxable Wage Base is assumed to increase at the annual rate of 3.25%.

Rationale: This assumption is based upon the actuary's review of inflation experience since 1948 and the relative relationships between this assumption and national average wage growth.

7. ***Disability:*** None

8. ***Expenses:*** None assumed

9. ***Recognition of IRC Benefit and Compensation Limitations:*** The benefit limitations under IRC Sections 415(b) and 401(a)(17) have been reflected in the determination of plan costs, and these limits are assumed to increase at the annual rate of 2.75%.

Rationale: This assumption is based upon assumed inflation.

10. ***Marital Status:*** 80% of participants are assumed to be married at the time of separation from service. Female spouses are assumed to be three years younger than their male counterparts.

- 11. Assumed Form of Payment:** Upon separation from service for causes other than death, 100% of active participants are assumed to elect the normal form of payment.

Surviving spouses of employees who separate from service due to death are assumed to commence payment in the normal form of annuity at the date of the participant's death.

Beneficiaries of non-married employees who separate from service due to death are assumed to receive a lump sum at the date of the participant's death.

Current deferred vested participants are assumed to elect the normal form at normal retirement age.

- 12. Changes in Actuarial Assumptions:** Reflected in this valuation are revised assumptions from the prior valuation as follows:

a. Mortality:

i. Current: See item B.1. above

ii. Prior: a) Pre-retirement Mortality: Pri-2012 Total Dataset Employee Table projected from the 2012 base year using Scale MP-2020 mortality improvement rates

b) Post-retirement Mortality:

i) Retired Participants: Pri-2012 Total Dataset Retiree Table projected from the 2012 base year using Scale MP-2020 mortality rates

ii) Contingent Annuitants of Retired Participants: Pri-2012 Total Dataset Retiree Table prior to Retired Participant death and Contingent Survivor Table after Retired Participant death projected from the 2012 base year using Scale MP-2020 mortality improvement rates

b. Interest Rates:

i. Current: See item B.3. above

ii. Prior:

October 2021 Segment Rates	
1 st Segment Rate	1.01%
2 nd Segment Rate	2.65%
3 rd Segment Rate	3.34%

Effective Rate (Equivalent Single Discount Rate)
3.10%

The changes above were made to reflect the actuary's best estimate of future plan experience.

Section VI – Outline of Principal Plan Provisions

A. Identifying Data

1. Plan name: Citizens Energy Group Retirement Plan
2. Type of plan: Defined benefit
3. Plan sponsor: Citizens Energy Group
4. Plan Year: January 1 - December 31
5. EIN/PN: 35-6000930/002
6. Employer: Citizens Energy Group

B. Participation

1. An Employee enters the plan on the first day he or she becomes an Eligible Employee
2. Eligible Employee is:
 - a. a regular full-time employee who (i) works a regularly scheduled 40-hour work week 52 weeks a year or (ii) works a flexible schedule which could cause an employee to work more or less than 40 hours in a given week
 - b. a Customer Service Contact Center Employee who works a seasonal schedule consisting of: (i) a period of 39 weeks at a regularly scheduled 40-hour work week plus a period of 13 weeks during which the employee is not scheduled to work for Citizens
3. Independent Contractors are not considered Eligible Employees

C. Contributions

1. Participant: none
2. Employer: all amounts necessary to adequately finance plan benefits

D. Eligibility for Retirement

1. Normal Retirement: age 65 (first of month coincident with or next following)
2. Early Retirement: age 45 plus 5 years of Vesting Service
3. Disability Retirement: none

E. Retirement Benefit Monthly Amounts

1. Normal Retirement:

For individuals who became participants on or after January 1, 1996, the sum of (a) and (b).
For individuals who became participants on or before December 31, 1995, the sum of (a) and (b), but not less than (c):

 - a. Base Benefit: 1.40% of Final Average Earnings times Years of Benefit Service
 - b. Excess Benefit: 0.40% of Final Average Earnings in excess of Covered Compensation times Years of Benefit Service

- c. For individuals who became participants on or before December 31, 1995, the sum of (i) and (ii):
- (i) the Accrued Retirement Benefit determined under (a) and (b) above but based on Benefit Service earned on and after January 1, 1996 and based on Final Average Earnings and Covered Compensation at the benefit determination date.
 - (ii) the Frozen Accrued Retirement Benefit determined on December 31, 1995 multiplied by a fraction (not less than 1.0) where the numerator is the participant's Final Average Earnings at the determination date and the denominator is the participant's Final Average Earnings determined at December 31, 1995 using the definition of Final Average Earnings in effect at such time.

For purposes of the above formula, earnings used to determine the Final Average Earnings shall be limited as applicable by IRC Section 401(a)(17).

2. Late Retirement:

Same formula as Normal Retirement but not less than the Actuarially Equivalent Value of the Accrued Retirement Benefit determined at Normal Retirement.

3. Early Retirement:

If the participant is at least age 55 and meets the Rule of 85 (i.e., age plus years of Vesting Service is at least 85 years) then there is no reduction to the Vested Accrued Retirement Benefit for early retirement. If the participant does not meet the above conditions for unreduced early retirement, then the Early Retirement Benefit is equal to the Vested Accrued Retirement Benefit determined at the Early Retirement Date reduced $1/180^{\text{th}}$ for every month Early Retirement precedes Normal Retirement Date for the first 60 months, $1/360^{\text{th}}$ for each of the next 60 months, and reduced actuarially thereafter.

If the participant terminates prior to eligibility for Early Retirement, the amount equal to the Vested Accrued Retirement Benefit may commence early once the participant reaches age 45 utilizing the same reductions described above.

4. Disability:

For terminations due to disability, the same benefit as if the participant terminated for reasons other than disability.

F. Normal Form of Monthly Payment

5-Year Certain and Life Annuity^{1,2}

¹ If participant dies before 60 monthly payments have been paid, in lieu of receiving payments for the remaining 60 months the beneficiary may elect a lump sum actuarially equivalent to the value of remaining certain payments.

² Joint and 50% Survivor Annuity (actuarially equivalent to the 5-year Certain and Life Annuity) is the automatic form of payment for married participants.

G. Optional Forms of Payment

Other optional forms of payment are available that are actuarially equivalent to the Normal Form, subject to applicable spousal consent requirements. Optional forms of payment include:

Lump Sum¹

Joint and 50% Contingent Annuity² (available for spouse and non-spouse beneficiaries)

Joint and 75% Contingent Annuity² (available for spouse and non-spouse beneficiaries)

Joint and 100% Survivor Annuity (available for spouse and non-spouse beneficiaries)

Social Security Adjustment Option (with first 60 payments guaranteed)³

¹ Limited to \$10,000 except in the case of death benefits.

² Reduces to the contingent survivor percentage only upon the death of the retiree (i.e., does not reduce if the contingent annuitant pre-deceases the retiree).

³ This option is only available to Participants who are at least age 55 and meet the Rule of 85 (i.e., age plus years of Vesting Service is at least 85 years) at the time of retirement. The amount that is guaranteed for 60 months is the reduced monthly amount that is scheduled to commence when the Participant attains the adjustment age.

H. Vested Termination Benefits

1. Benefit: entitlement to vested percentage of Accrued Retirement Benefit

2. Vesting Schedule:

Years of Vesting Service	Vesting Percent ¹
Less than 5	0%
5 but less than 6	50%
6 but less than 7	60%
7 but less than 8	70%
8 but less than 9	80%
9 but less than 10	90%
10 or more	100%

¹ Participants who attain age 65 while employed by Citizens or any Affiliated Employer become 100% Vested.

3. Accrued Retirement Benefit: the monthly benefit that a participant has accrued before reaching Normal Retirement Age payable in the Normal Form of payment beginning at Normal Retirement Age; the amount of the Accrued Retirement Benefit is determined when a participant terminates his employment and is calculated like the Normal Retirement Benefit but using only Years of Benefit Service and Final Average Earnings determined at the date of termination.

I. Pre-retirement Death Benefits

If a married participant dies prior to his or her Annuity Starting Date, the surviving spouse shall receive a monthly annuity¹ commencing on the first of the month following death equal to 60%² of the participant's Vested Accrued Retirement Benefit. In the event the surviving spouse dies prior to receiving 60 monthly annuity payments, then the spouse's named beneficiary shall receive a lump sum equal to 60 times the monthly annuity amount offset by the sum of annuity amounts already received by the surviving spouse.

¹ The surviving spouse may elect an actuarially equivalent single lump sum in lieu of a monthly annuity.

² 60% is reduced by 0.5% for each year that the spouse is more than 5 years younger than the participant.

If a non-married participant (or a married participant who elects, subject to spousal consent, to name a non-spouse beneficiary) dies prior to his or her annuity starting date, the non-spouse beneficiary will receive a single lump sum that is Actuarially Equivalent to 60% times the Vested Accrued Retirement Benefit determined at the date of death.

J. Post-Retirement Death Benefits

No death benefit is payable other than the continuance of benefit payments to a surviving spouse or beneficiary if provided under the optional form of payment elected at the time of retirement.

K. Basis of Actuarial Equivalence

For purposes of monthly annuity options, determined in accordance with Tables A, B and C included at the end of the Plan Document.

For all other ages not shown in Tables A, B and C of the Plan Document and for purposes of lump sums, determined using the UP-1984 Mortality Table set forward ½ year for participants and set back 3½ years for beneficiaries and a 7.0% interest rate assumption compounded annually.

L. Covered Compensation

The average of the contribution and benefit bases in effect under section 230 of the Social Security Act for each year in the 35-year period ending with the year in which the participant attains the social security retirement age as defined under Code section 415(b)(8), as set forth in the transitional covered compensation table for each year prior to 1995 and for each year on and after 1995 the covered compensation table (as defined in Internal Revenue Service Notice 89-70 and any applicable notice thereafter) published by the Internal Revenue Service for each such year. The determination of Covered Compensation will be made as of the date of determination, or, if earlier, the retirement, death, or separation from service of the participant.

M. Final Average Earnings

The average monthly earnings amount determined by using the average Basic Yearly Earnings received from Citizens for the period of five (5) Plan Years which produce the highest average out of the last ten (10) Plan Years prior to the date of determination, or if earlier, the retirement, death or separation from service of a participant; provided, however, if a participant retires, dies or separates from service during a Plan Year that partial Plan Year will be considered as well as the preceding ten (10) Plan Years. "Final Average Earnings" for participants who retire, die or separate from service during a Plan Year may be calculated by including such partial Plan Year as part of one (1) of the five (5) highest Plan Years. The monthly earnings for the remaining months needed to complete any partial Plan Year will be based on the average monthly earnings for the complete Plan Year with the next highest earnings not being used as one (1) of the four (4) complete Plan Years. Such monthly earnings in the preceding sentence will be determined by determining the average daily earnings of such Plan Year (Basic Yearly Earnings for that Plan Year divided by three hundred sixty-five (365) or three hundred sixty-six (366) as applicable) and multiplying the result by the number of days remaining in the partial Plan Year.

If a participant received Basic Yearly Earnings from Citizens for fewer than five (5) Plan Years during the period described above, Final Average Earnings means the monthly earnings determined by using the average Basic Yearly Earnings received from Citizens for the entire period for which the participant received Basic Yearly Earnings from Citizens.

Final Average Earnings for any period of time while an Eligible Employee is in the "suspense file" (pursuant to the "indefinite absence due to personal or occupational illness or injury" policies of Citizens) will be determined by calculating Basic Yearly Earnings as zero for each Plan Year such Eligible Employee is in such suspense period. If such suspense period is ten (10) Plan Years or more, Final Average Earnings will equal the last Basic Yearly Earnings such participant received immediately prior to his or her suspense period, annualized.

N. Vesting Service

For periods prior to 2007, based on the records of the employer and the terms of the Plan then in effect. For periods on and after January 1, 2007, any period of time during which an Eligible Employee is employed by Citizens or an Affiliated Employer. Special rules apply to participants who retire or separate from service and are later re-employed.

O. Benefit Service

For periods prior to 1975, based on the records of the employer and the terms of the Plan then in effect. For periods on and after January 1, 1975, one year or fraction thereof for each year of Vesting Service as a participant except no Benefit Service will be earned with respect to any period of service with an Affiliated Employer.

P. Affiliated Employer

Any corporation which is a member of a controlled group of corporations (as defined in Code section 414(b)) which includes Citizens; any trade or business (whether or not incorporated) which is under common control (as defined in Code section 414(c)) with Citizens; any organization (whether or not incorporated) which is a member of an affiliated service group (as defined in Code section 414(m)) which includes Citizens; and any other entity required to be aggregated with Citizens pursuant to regulations under Code section 414(o). For purposes of Code section 415, in applying Code section 414(b) and (c) to determine an Affiliated Employer, the phrase "more than 50 percent" will be substituted for the phrase "at least 80 percent" each place it appears in Code section 1563(a)(1). Each such Affiliated Employer will be included as an Affiliated Employer only for such period or periods during which such employer is under such common control, so affiliated, or so aggregated and only to the extent required by any applicable provision of the Code.

Q. Basic Yearly Earnings

The cash remuneration of a participant received from Citizens which is reportable as wages for federal income tax purposes,

- Including: (a) amounts excludable from the taxable income of the participant because of an election under Code Sections 401(k), 125, and 132(f)(4), (b) for amounts paid on or after January 1, 1988, annual payments under the management incentive program, (c) for amounts paid on or after January 1, 1988, quarterly profit sharing payments to Manufacturing Division employees of Citizens; and

- Excluding: (a) incentive compensation payments made pursuant to the Citizens Energy Group Executive Incentive Plan, (b) overtime payments and any other additional or extraordinary compensation, except as specifically provided below

For any participant who separates from service on or before December 31,

- any cash remuneration not otherwise excluded hereunder that is earned during the Plan Year but paid or reported in the following Plan Year will be included as Basic Yearly Earnings for the Plan Year ending on such December 31; and
- any vacation pay treated as sold in accordance to Citizens' paid time off policy but not actually paid or reported until the following Plan Year will be included as Basic Yearly Earnings for the Plan Year ending on such December 31.

Basic Yearly Earnings include, but are not limited to, regular pay, permission pay, disciplinary pay, on call compensation, light duty, sick pay, hospital pay, work-related injury, family sick pay, family death pay, vacation taken or sold, paid time off, holiday pay, pay for holiday worked, short-term disability pay, height differential, shift differential, civic duty, retroactive back pay, union time pay, gainsharing, executive bonus, lump sum salary incentive, performance bonus, and Citizens variable plan pay; provided, however, the following payments are not included in Basic Yearly Earnings if not paid until after retirement or separation from service: (a) vacation not taken or not treated as sold due to Citizens rules, (b) executive bonus, (c) quarterly profit sharing payments to Manufacturing Division employees of Citizens, and (d) Citizens variable plan pay.

Basic Yearly Earnings shall be limited as required under Code section 401(a)(17); in general, for Plan Years beginning on or after January 1, 1996,

- for an individual who became a participant on or before December 31, 1995, Basic Yearly Earnings will not exceed \$235,840 (increased by the applicable Cost of Living Adjustment for the year, if any, prescribed by the Secretary of the Treasury for governmental plans); and
- for an individual who became a participant after December 31, 1995, Basic Yearly Earnings used in determining benefit accruals in any Plan Year beginning after December 31, 2001 will not exceed \$200,000 (adjusted for cost-of-living increases in accordance with Code section 401(a)(17)(B)) for determination periods beginning after December 31, 2001, \$170,000 for determination periods beginning in 2000 or 2001, \$160,000 for determination periods beginning in 1997, 1998 or 1999, and \$150,000 the for determination period beginning in 1996.

Section VII – Summary of Participant Data

A. Participant Data Reconciliation

	Active Participants ¹	Current Payment Status ²	Vested Terminated ³	Total
1. As of October 1, 2021	1,048	932	210	2,190
2. Change of status				
a. normal retirement	(2)	4	(2)	0
b. late retirement	(12)	12	0	0
c. early retirement	(24)	27	(3)	0
d. disability	0	0	0	0
e. death	(1)	(28)	0	(29)
f. nonvested termination	(45)	0	0	(45)
g. vested termination	(27)	0	27	0
h. completion of payment	0	(1)	(3)	(4)
i. rehires	1	0	0	1
j. other	0	4 ⁴	0	4
k. net changes	(110)	18	19	(73)
3. New participants	82	0	0	82
4. As of October 1, 2022	1,020	950	229	2,199

¹ Includes any participant who might be beyond Normal Retirement Date.

² Includes deceased participants whose beneficiaries are receiving benefits.

³ Includes deceased participants whose beneficiaries are entitled to receive benefits.

⁴ New alternate payees that commenced benefits during the year pursuant to the terms of a QDRO.

B. Age/Service Table as of October 1, 2022

Current Age	Current Years of Benefit Service														Percent of Total
	$t < 1$	$1 \leq t < 2$	$2 \leq t < 3$	$3 \leq t < 4$	$4 \leq t < 5$	$5 \leq t < 10$	$10 \leq t < 15$	$15 \leq t < 20$	$20 \leq t < 25$	$25 \leq t < 30$	$30 \leq t < 35$	$35 \leq t < 40$	$40 \leq t$	Total	
$x < 25$	4	12	5	2	4	0	0	0	0	0	0	0	0	27	2.65%
$25 \leq x < 30$	7	12	13	12	6	8	0	0	0	0	0	0	0	58	5.69%
$30 \leq x < 35$	5	12	7	16	9	30	6	0	0	0	0	0	0	85	8.33%
$35 \leq x < 40$	4	10	8	20	8	25	21	2	0	0	0	0	0	98	9.61%
$40 \leq x < 45$	1	2	6	8	6	26	28	11	9	0	0	0	0	97	9.51%
$45 \leq x < 50$	0	5	7	9	7	35	31	11	16	1	0	0	0	122	11.96%
$50 \leq x < 55$	1	7	2	7	4	32	36	8	23	13	9	1	0	143	14.02%
$55 \leq x < 60$	0	2	1	4	1	35	56	17	17	7	12	7	0	159	15.59%
$60 \leq x < 65$	0	0	1	7	2	41	54	8	16	6	9	9	13	166	16.27%
$x \geq 65$	0	1	0	2	0	22	22	3	4	2	1	4	4	65	6.37%
Service Totals	22	63	50	87	47	254	254	60	85	29	31	21	17	1,020	100.00%
Percent of Total	2.16%	6.18%	4.90%	8.53%	4.61%	24.90%	24.90%	5.88%	8.33%	2.84%	3.04%	2.06%	1.67%	100.00%	

Average Attained Age: 49.05

Average Benefit Service: 11.29

C. Summary of Deferred Vested Participants

Deferred Vested Participants by Age as of October 1, 2022

Age	Count	Sum of Monthly Benefits	Average Monthly Benefits
$x < 35$	2	\$ 383	\$ 192
$35 \leq x < 40$	14	8,676	\$ 620
$40 \leq x < 45$	22	12,247	\$ 557
$45 \leq x < 50$	26	25,461	\$ 979
$50 \leq x < 55$	34	34,888	\$ 1,026
$55 \leq x < 60$	55	49,446	\$ 899
$60 \leq x < 65$	63	47,918	\$ 761
$x \geq 65$	13	3,885	\$ 299
Total	229	\$ 182,904	\$ 799

D. Summary of Retirees and In-Pay Beneficiaries

Retirees/In-Pay Beneficiaries by Age as of October 1, 2022

Age	Count	Sum of Monthly Benefits	Average Monthly Benefits
$x < 55$	9	\$ 5,595	\$ 622
$55 \leq x < 60$	49	56,559	\$ 1,154
$60 \leq x < 65$	155	274,671	\$ 1,772
$65 \leq x < 70$	230	333,008	\$ 1,448
$70 \leq x < 75$	202	344,493	\$ 1,705
$75 \leq x < 80$	145	188,805	\$ 1,302
$80 \leq x < 85$	87	124,455	\$ 1,431
$85 \leq x < 90$	59	89,124	\$ 1,511
$90 \leq x$	14	16,948	\$ 1,211
Total	950	\$1,433,658	\$ 1,509

Section VIII – Glossary of Actuarial Terms

Accrued Liability	This is computed differently under different actuarial cost methods. Generally, the Accrued Liability represents the portion of the Present Value of Future Benefits attributed to periods of service preceding the valuation date.
Actuarial Gain (Loss)	A measure of the difference between actual experience and that expected based on the actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with the particular actuarial cost method used.
Actuarial Value of Assets	The value of Plan Assets used by an actuary for an actuarial valuation. <i>(See the Actuarial Methods and Assumptions section of this report for a description of the methodology used to determine the Actuarial Value of Assets used in this report.)</i>
Entry Age Normal Actuarial Cost Method	An actuarial cost method under which the Present Value of Future Benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to the year of service during the valuation year is called the Normal Cost. The portion of this present value not provided for at a valuation date by the Present Value of Future Normal Costs is called the Accrued Liability.
Normal Cost	Computed differently under different actuarial cost methods, the Normal Cost generally represents the portion of the Actuarial Present Value of Total Projected Plan Benefits attributed to the current year of service for active employees.
Present Value of Accrued Benefits	The actuarial present value of all accrued benefits (i.e., all benefits attributed by the pension benefit formula to employee service and compensation rendered prior to the valuation date).
Present Value of Future Benefits	Future benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial Present Value of Future Benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.
Present Value of Future Normal Costs	The difference between the Present Value of Future Benefits and the Accrued Liability under a given actuarial cost method.
Unfunded Accrued Liability	The excess, if any, of the Accrued Liability over the Actuarial Value of Assets.



**CITIZENS ENERGY GROUP
QUALIFIED GOVERNMENTAL EXCESS
BENEFIT ARRANGEMENT**

FINANCIAL ACCOUNTING STANDARDS BOARD

ASC 715-20 AND 715-30

DISCLOSURE FOR FISCAL YEAR ENDING SEPTEMBER 30, 2022

AND

EXPENSE FOR FISCAL YEAR ENDING SEPTEMBER 30, 2023



Rudd and Wisdom, Inc.

Rudd and Wisdom, Inc.

CONSULTING ACTUARIES

Mitchell L. Bilbe, F.S.A.
Evan L. Dial, F.S.A.
Philip S. Dial, F.S.A.
Charles V. Faerber, F.S.A., A.C.A.S.
Mark R. Fenlaw, F.S.A.
Brandon L. Fuller, F.S.A.
Shannon R. Hatfield, F.S.A.

Christopher S. Johnson, F.S.A.
Oliver B. Kiel, F.S.A.
Dustin J. Kim, F.S.A.
Edward A. Mire, F.S.A.
Rebecca B. Morris, A.S.A.
Amanda L. Murphy, F.S.A.

Michael J. Muth, F.S.A.
Khiem Ngo, F.S.A., A.C.A.S.
Timothy B. Seifert, F.S.A.
Chelsea E. Stewart, F.S.A.
Raymond W. Tilotta
Ronald W. Tobleman, F.S.A.
David G. Wilkes, F.S.A.

October 28, 2022

PERSONAL AND CONFIDENTIAL

Mr. Phil Zbojniewicz
Director of Accounting Services
Citizens Energy Group
2020 North Meridian Street
Indianapolis, Indiana 46202

Re: Application of FASB ASC 715-20 and
715-30 to the 2021-2022 and 2022-2023
Fiscal Years

Dear Phil:

Enclosed is our Accounting Requirements Actuarial Valuation of the Citizens Energy Group Qualified Governmental Excess Benefit Arrangement (QGEBA) as of September 30, 2022. The purpose of this valuation is to provide the employer and its auditors with the pension cost information and certain year-end accounting and disclosure requirements in accordance with Financial Accounting Standards Board Accounting Standards Codification (FASB ASC) 715-20 and 715-30 which establish the accounting and disclosure requirements for pension plans. The results of this valuation are appropriate for this purpose only.

The expense results for the 2021-2022 fiscal year are identical to our prior FASB ASC 715-30 report dated October 29, 2021.

Note: This report may be provided to third parties only if distributed in its entirety.

Background

FASB ASC 715-20 and 715-30 together establish the standards of financial reporting and accounting for an employer that offers pension benefits to its employees. These standards include provisions for a liability or asset related to the pension plan to be shown directly on the employer's financial statements. Also, the pension expense shown on the financial statements may vary from the actual contribution. This report will provide you and your auditor with the information required by these accounting standards.

Net Periodic Pension Cost

Net Periodic Pension Cost (NPPC) is the accrual expense/(income) entry on the income statement for plan benefits. This amount is \$748,969 for 2021-2022.

For the 2022-2023 fiscal year, the NPPC is expected to be \$352,138. The decrease in expense relative to the 2021-2022 fiscal year is primarily attributable to: (a) the change in the yield curve spot rates which resulted in an increase in the effective discount rate from 2.53% at September 30, 2021 to 5.11% at September 30, 2022 and (b) a prior year active participant retiring with no benefit payable from the QGEBA. The actual expense for the 2022-2023 fiscal year may differ from this amount if a subsequent mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

Contents of this Report

In addition to the development of the Net Periodic Pension Cost (NPPC), this report also includes certain information to be disclosed in your company financial statement. The Table of Contents following this cover letter contains a complete list of all sections of the report. However, several key sections are described below:

- Management Summary – (Section II):
 - A Summary of NPPC, Accounting Liabilities and Assets
 - Participant Demographics
 - A Discussion of Other Topics for Management’s Review
- Net Periodic Pension Cost – (Section III):
 - NPPC for the 2021-2022 Fiscal Year
 - NPPC for the 2022-2023 Fiscal Year
 - Estimated Funded Status for 2022-2023 Interim Period Statements of Financial Position
- Disclosure as of September 30, 2022 – (Section IV)
- Summary of Assets – (Section VI)
- Glossary – (Section IX)
- Disclosure and Expense Results by Division – (Appendix)

Action Items

The following list contains certain action items for company management:

1. Review the Management Summary (Section II) of this report.
2. Include the required information in Section IV in your company financial statement.
3. Notify us of any activities during the remainder of the 2022-2023 fiscal year that would lead to a mid-year remeasurement (e.g., a plan amendment, a curtailment or a settlement).

4. Make adjustments to the plan's 2022-2023 interim period funded status following the illustrative adjustments shown on page III-4.

Variability in Future Actuarial Measurement

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

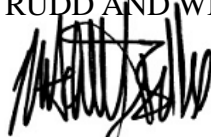
- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and
- Changes in plan provisions, applicable law or accounting standards.

We have not been asked to perform and have not performed any stochastic or deterministic sensitivity analyses of the potential ranges of such future measurements. If you have an interest in the results of any such analysis, please let us know.

If you have any questions concerning this information, please do not hesitate to call or write.

Respectfully submitted,

RUDD AND WISDOM, INC.



Mitchell L. Bilbe, F.S.A.



Christopher S. Johnson, F.S.A.

MLB/CSJ:ph

Enclosures

cc: Adrienne Bowers
Russ Clemens
Craig Jackson
Camela Johnson
Sabine Karner
Jodi Whitney



FASB ASC 715-20 AND 715-30

ACTUARIAL VALUATION

AS OF

SEPTEMBER 30, 2022

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Section I - Certification of FASB ASC 715-20 and 715-30 Actuarial Valuation as of September 30, 2022

At the request of Citizens Energy Group, we have performed an actuarial valuation of the plan as of September 30, 2022, under FASB ASC 715-20 and 715-30. The purpose of this report is to present the results of our valuation providing the information necessary to determine financial statement expense entries consistent with the accounting standards codification for the fiscal year ending September 30, 2022 and to determine expense entries for 2022-2023.

Actuarial computations under FASB ASC 715-20 and 715-30 are for purposes of fulfilling certain employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein.

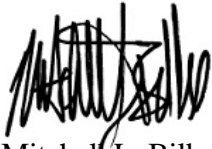
We have based our valuation on employee data as of September 30, 2022 and QGEBA Trust asset information as of the measurement date provided by Ms. Adrienne Bowers. We have used the actuarial methods and assumptions described in Section VII of this report. The actuarial valuation has been performed on the basis of the plan benefits described in Section VIII. Liabilities have been determined as of the measurement date (September 30, 2022) consistent with procedures described in FASB ASC 715-20 and 715-30.

To the best of our knowledge, all current employees eligible to participate in the plan as of the valuation date and all other individuals who have a remaining vested benefit under the plan have been included in the valuation. Further, to the best of our knowledge all plan benefits have been considered in the development of plan costs.

The plan sponsor remains solely responsible for the accuracy and comprehensiveness of the data provided. However, to the best of our knowledge, no material biases exist with respect to any imperfections in the data provided by these sources. To the extent that any data imperfections existed in the historical compensation database, we have addressed the imperfections by application of the increase assumptions specified in Section VII. To the extent any imperfections exist in service records we have relied on best estimates provided by the employer. We have not audited the data provided, but have reviewed it for reasonableness and consistency relative to previously provided information. We have utilized software licensed from Winklevoss Technologies, LLC. in the development of the liabilities summarized in the report.

To the best of our knowledge, the actuarial information supplied in this report is complete and accurate. The discount rates used for the calculation of the net periodic pension cost and for measuring liabilities as of the measurement date are those rates which have been determined consistent with the methodology prescribed under FASB ASC 715-30-35-44 for that purpose. Each other assumption is selected by the plan sponsor, subject to our advice. In our opinion, each of these assumptions is reasonably related to the experience of the plan and to reasonable expectations and is reasonable for the purpose of these measurements with respect to that individual assumption. We are neither aware of any material inconsistencies among the assumptions nor are we aware of any unreasonable results caused by the aggregation of the assumptions.

We hereby certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

A handwritten signature in black ink, appearing to read "Mitchell L. Bilbe".

Mitchell L. Bilbe, F.S.A.
Member of American Academy of Actuaries

A handwritten signature in black ink, appearing to read "Christopher S. Johnson".

Christopher S. Johnson, F.S.A.
Member of American Academy of Actuaries

A handwritten signature in black ink, appearing to read "Brandon L. Fuller".

Brandon L. Fuller, F.S.A.
Member of American Academy of Actuaries

Section II – Management Summary

All employer liabilities presented throughout this report have been determined based upon the actuarial methods and assumptions outlined in Section VII and the plan provisions outlined in Section VIII.

A. Net Periodic Pension Cost Summary

Division No.	Division	Net Periodic Pension Cost	
		FY 2021-2022	FY 2022-2023 ¹
1	Corporate Shared Services	\$ 483,750	\$ 194,125
2	Gas	117,885	76,548
4	Manufacturing	0	0
6	Steam	0	0
7	West Street Chilled Water	0	0
20	Water Company	147,334	81,465
92	Wastewater	0	0
	Total	\$ 748,969	\$ 352,138

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a subsequent mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

Net Periodic Pension Cost (NPPC) is the accrual expense/(income) entry on the income statement for plan benefits. This amount is determined separately from the employer contribution amount. The determination of this number involves actuarial calculations performed in accordance with rules set forth in FASB ASC 715-30.

B. Participant Demographics as of September 30, 2022

Participants	Number	Estimated Payroll for 2022-2023
Actives	1	\$ 408,489
Vested Terminated	0	N/A
Retirees and Beneficiaries	6	N/A
Total	7	\$ 408,489

C. Accounting Liabilities and Assets

	As of October 1, 2021 for 2021-2022 Expense	As of September 30, 2022 for Disclosure and 2022-2023 Expense
1. a. Fair Value of Assets ¹	\$ 0	\$ 0
b. Market-Related Value of Assets ¹	\$ 0	\$ 0
2. Effective Discount Rate	2.53%	5.11%
3. Accumulated Benefit Obligation (ABO)		
a. Actives	\$ 112,902	\$ 25,062
b. Vested Terminated	0	0
c. Retirees	3,487,410	2,640,672
d. Total	\$ 3,600,312	\$ 2,665,734
4. Obligation for Future Salary Increases	437,911	42,640
5. Projected Benefit Obligation (PBO)	\$ 4,038,223 ²	\$ 2,708,374 ³
6. Service Cost	\$ 158,025	\$ 33,949
7. Net Periodic Pension Cost	\$ 748,969	\$ 352,138 ⁴

¹ Assets in the QGEBA Trust are not eligible to be considered plan assets for purposes of FASB ASC 715-20 and 715-30.

² \$2,271,326 attributable to Division 1 (Corporate Shared Services), \$675,912 attributable to Division 2 (Gas) and \$1,090,985 attributable to Division 20 (Water Company).

³ \$1,398,927 attributable to Division 1 (Corporate Shared Services), \$498,069 attributable to Division 2 (Gas) and \$811,378 attributable to Division 20 (Water Company).

⁴ Actual expense for the 2022-2023 fiscal year may differ from this amount if a subsequent mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

1. Liabilities

The **Projected Benefit Obligation (PBO)** and **Accumulated Benefit Obligation (ABO)** are actuarial present values as of a date of all benefits attributed by the pension benefit formula to employee service rendered prior to that date. The PBO is measured using assumptions as to future compensation levels if the pension benefit formula is based on those future compensation levels, whereas the ABO includes no assumption about future compensation levels.

Under FASB ASC 715-30-25-1, a liability is recognized on the balance sheet if the PBO exceeds the fair value of assets. Likewise, an asset is recognized on the balance sheet if the PBO is less than the fair value of assets.

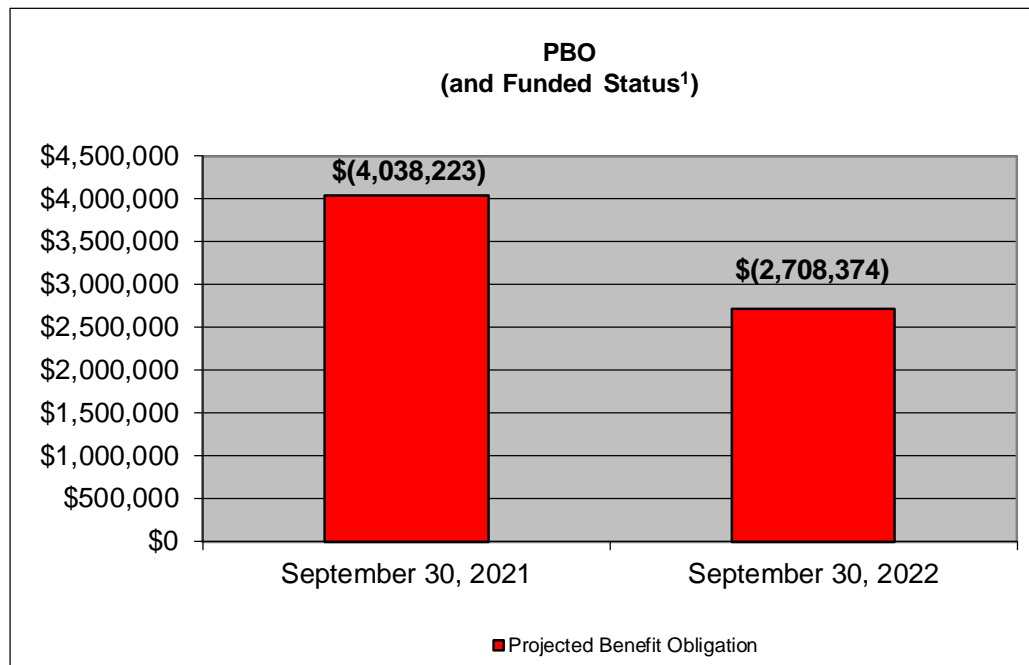
Components of the PBO which have not yet been recognized in expense are recorded as adjustments to Accumulated Other Comprehensive Income.

2. Assets

The **Fair Value of Assets (FVA)** is equal to the market value of assets, excluding any receivable contributions. However, the assets are held in the QGEBA Trust which is a Grantor Trust within the meaning of Internal Revenue Code §671, and the assets are not considered irrevocable since they would be subject to claims of the company's general creditors in the event of company insolvency (per Section 4 of the Trust Agreement for Citizens Energy Group QGEBA). Thus, the assets are not eligible to be considered plan assets for purposes of FASB ASC 715-20 and 715-30. Accordingly, as of September 30, 2021, the FVA was \$0 and as of September 30, 2022 the FVA is \$0.

D. Funded Status and Accumulated Other Comprehensive Income

The **Funded Status** is defined as the Market Value of Assets minus the Projected Benefit Obligation (PBO). Under FASB ASC 715-30-25-1, a liability is recognized on the balance sheet if the PBO exceeds the fair value of assets (i.e., the Funded Status is negative). Conversely, an asset is recognized on the balance sheet if the PBO is less than the fair value of assets (i.e., the Funded Status is positive). The graph below compares the Fair Value of Assets to the PBO. The corresponding Funded Status is shown above each column.



¹ Assets held in the QGEBA Trust are not eligible to be considered plan assets for purposes of FASB ASC 715-20 and 715-30.

Under FASB ASC 715-30-25-4, the employer must recognize as **Accumulated Other Comprehensive Income (AOCI)** any amount of **Net (Gain)/Loss, Net Transition Obligation/(Asset)** and **Net Prior Service Cost/(Credit)** that has not yet been recognized as a component of expense. As these amounts are amortized and expensed in future years, the AOCI is written down. Similarly, as new (Gains)/Losses arise or new Prior Service Costs/(Credits) are established, the amount of AOCI will be adjusted.

The AOCI as of September 30, 2021 was \$3,818,947, and the AOCI as of September 30, 2022 is \$1,957,647.

E. Expense for 2022-2023

The NPPC (prior to any curtailment or settlement recognition) for the fiscal year ending September 30, 2023 is expected to be \$352,138. This expense is based upon the September 30, 2022 FTSE Pension Discount Curve and the plan participant census as of September 30, 2022. The actual expense for the 2022-2023 fiscal year may differ from this amount if a mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

F. Interim Period Statements of Financial Position

Under FASB ASC 715-30-35-65, an employer must report the funded status in its interim-period statements of financial position equal to the funded status reported in its previous year-end statement of financial position adjusted for (a) subsequent accruals of net periodic benefit cost arising from the service cost, interest cost and return on plan assets components of expense and (b) subsequent contributions to a funded plan or benefit payments from an unfunded plan. Page III-3 of this report shows the components of 2022-2023 net periodic benefit cost by fiscal quarter. The employer must use this type of information in conjunction with its plan contributions during the year to adjust the funded status that is reported in its 2022-2023 interim-period statements as shown on page III-4. However, if the funded status is remeasured due to a mid-year event (e.g., a plan amendment, a curtailment or a settlement) such remeasured funded status with adjustments shall be reported in subsequent interim periods.

G. No Changes in Plan Provisions

This valuation reflects identical plan provisions to those recognized in the prior valuation prepared for the plan. Plan provisions are summarized in Section VIII.

H. Changes in Actuarial Assumptions

The mortality projection assumption was updated to reflect the MP-2021 projection scale recently published by the Society of Actuaries. Discount rates were adjusted in accordance with FASB ASC 715-30-35-44. Earnings progression, taxable wage base and IRC limitations assumptions were updated to reflect recent economic trends in inflation and financial markets in order to remain consistent with the discount rate. Actuarial assumptions are summarized in Section VII. The following exhibit displays the approximate effect of various assumption changes on the PBO and Service Cost:

Approximate Effect of Year-End Assumption Changes	PBO (\$ Thousands)	Service Cost ³ (\$ Thousands)
1. September 30, 2022 prior to assumption changes:	\$ 3,457	\$ 47
2. Effect of Change in Discount Rate from 2.53% to 5.11% ¹ :	(760)	(14)
3. Effect of Change in Mortality Assumptions:	10	0
4. Effect of Changes in all Other Assumptions ² :	1	1
5. September 30, 2022 after assumption changes:	\$ 2,708	\$ 34

¹ Effective discount rates shown for illustrative purposes. The PBO and Service Cost were actually calculated using the full yield curve as of each measurement date.

² Earnings progression, taxable wage base and IRC limitations assumptions were updated to reflect changes in inflation expectations as of September 30, 2022.

³ Includes interest to the end of next fiscal year.

I. Recent Accounting Standards Changes

Accounting Standards Update 2018-14

The Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2018-14 in August of 2018 as part of the disclosure framework project. The disclosure framework project's objective and primary focus are to improve the effectiveness of disclosures in the notes to financial statements by facilitating clear communication of the information required by generally accepted accounting principles (GAAP) that is most important to users of each entity's financial statements.

The amendments in this Update modify the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The following disclosure requirements are removed from Subtopic 715-20:

- a. The amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year.
- b. The amount and timing of plan assets expected to be returned to the employer.
- c. Related party disclosures about the amount of future annual benefits covered by insurance and annuity contracts and significant transactions between the employer or related parties and the plan.
- d. For nonpublic entities, the reconciliation of the opening balances to the closing balances of plan assets measured on a recurring basis in Level 3 of the fair value hierarchy. However, nonpublic entities will be required to disclose separately the amounts of transfers into and out of Level 3 of the fair value hierarchy and purchases of Level 3 plan assets.
- e. For public entities, the effects of a one-percentage-point change in assumed health care cost trend rates on the (a) aggregate of the service and interest cost components of net periodic benefit costs and (b) benefit obligation for postretirement health care benefits.

The following disclosure requirements are added to Subtopic 715-20:

- a. The weighted-average interest crediting rates for cash balance plans and other plans with promised interest crediting rates.
- b. An explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period.

The amendments in this Update also clarify the disclosure requirements in paragraph 715-20-50-3, which state that the following information for defined benefit pension and other post-retirement benefit plans should be disclosed:

- a. The projected benefit obligation (PBO) and fair value of plan assets for defined benefit pension plans with PBOs in excess of plan assets.

- b. The accumulated benefit obligation (ABO) and fair value of plan assets for defined benefit pension plans with ABOs in excess of plan assets.
- c. The accumulated postretirement benefit obligation (APBO) and fair value of plan assets for other post-retirement benefit plans with APBOs in excess of plan assets.

The amendments in this Update became effective for fiscal years ending after December 15, 2020 for Public Business Entities¹ and for fiscal years ending after December 15, 2021 for all other entities.

An entity should apply the amendments in this Update on a retrospective basis to all periods presented.

¹ For purposes of FASB, a Public Business Entity is an enterprise: (a) whose debt or equity securities are traded in a public market, either on a stock exchange or in the over-the-counter market (including securities quoted only locally or regionally), or (b) whose financial statements are filed with a regulatory agency in preparation for the sale of any class of securities.

Section III – Net Periodic Pension Cost

A. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2022

1. Charges to Income from Operations ¹		
a. Service Cost including interest to end of year		\$ 158,025
2. Other Components of Net Periodic Pension Cost ²		
a. Interest Cost		\$ 76,503
b. Expected Return on Assets		
i. Market-Related Value at beginning of year	\$ 0	
ii. Expected distributions, weighted for timing	(222,783)	
iii. Expected contributions, weighted for timing	<u>222,783</u> ³	
iv. Expected Return Basis	\$ 0	
v. Long-term rate of return	N/A	
vi. Expected Return on Assets [-(iv) x (v)]		0
c. Amortization of Transition Obligation/(Asset)		0
d. Amortization of Prior Service Cost/(Credit)		47,568
e. Amortization of Net (Gain)/Loss		<u>466,873</u>
f. Subtotal		\$ 590,944
3. Net Periodic Pension Cost [1(a) + 2(f)]		\$ 748,969

¹ Other compensation costs arising from employee services rendered.

² Reported outside of income from operations.

³ Expected pay-as-you-go contributions to cover benefit payments as they come due for retired participants.

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Charges to Income from Operations ²		\$ 33,949
a. Service Cost including interest to end of year		
2. Other Components of Net Periodic Pension Cost ³		\$ 127,716
a. Interest Cost		
b. Expected Return on Assets		
i. Market-Related Value at beginning of year	\$ 0	
ii. Expected distributions, weighted for timing	(216,586)	
iii. Expected contributions, weighted for timing	<u>216,586</u> ⁴	
iv. Expected Return Basis	\$ 0	
v. Long-term rate of return	N/A	
vi. Expected Return on Assets [-(iv) x (v)]		0
c. Amortization of Transition Obligation/(Asset)		0
d. Amortization of Prior Service Cost/(Credit)		47,568
e. Amortization of Net (Gain)/Loss		<u>142,905</u>
f. Subtotal		\$ 318,189
3. Net Periodic Pension Cost [1(a) + 2(f)]		\$ 352,138

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a subsequent mid-year event requires a remeasurement (e.g., a plan amendment, a curtailment or a settlement).

² Other compensation costs arising from employee services rendered.

³ Reported outside of income from operations.

⁴ Expected pay-as-you-go contributions to cover benefit payments as they come due for retired participants.

C. 2022-2023 Net Periodic Pension Cost By Fiscal Year Quarter

Pension Cost Component	Fiscal Year Quarter				Total for Fiscal Year ¹
	10/01/2022 to 12/31/2022	01/01/2023 to 03/31/2023	04/01/2023 to 06/30/2023	07/01/2023 to 09/30/2023	
1. Charges to Income from Operations - Other Compensation Costs Arising from Employee Services Rendered					
a. Service Cost ²	\$ 8,487	\$ 8,487	\$ 8,487	\$ 8,488	\$ 33,949
2. Other Components of Net Periodic Pension Cost – Reported Outside of Income from Operations					
a. Interest Cost ²	\$ 31,929	\$ 31,929	\$ 31,929	\$ 31,929	\$ 127,716
b. Expected Return on Assets ²	0	0	0	0	0
c. Amortized Recognition of:					
i. Transition Obligation/(Asset)	0	0	0	0	0
ii. Prior Service Cost/(Credit)	11,892	11,892	11,892	11,892	47,568
iii. Net (Gain)/Loss	<u>35,726</u>	<u>35,726</u>	<u>35,727</u>	<u>35,726</u>	<u>142,905</u>
d. Subtotal	<u>\$ 79,547</u>	<u>\$ 79,547</u>	<u>\$ 79,548</u>	<u>\$ 79,547</u>	<u>\$ 318,189</u>
3. Net Periodic Pension Cost [1(a) + 2(d)]	\$ 88,034	\$ 88,034	\$ 88,035	\$ 88,035	\$ 352,138

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a subsequent mid-year event requires a remeasurement (e.g., plan amendment).

² In accordance with FASB ASC 715-30-35-65, these components of expense must be used to adjust the funded status of the plan reported at the end of the previous fiscal year to an interim-period reporting date. In addition, the funded status reported at an interim-period reporting date must be adjusted by employer contributions to the plan subsequent to the previous fiscal year-end. However, if the funded status is remeasured due to a mid-year event (e.g., a plan amendment, a curtailment or a settlement), such remeasured funded status with adjustments shall be reported in any subsequent interim-period. (See page III-4 for an illustration of the funded status progression.)

D. Estimated Funded Status for 2022-2023 Interim Period Statements of Financial Position

	Interim Period Ending		
	12/31/2022	03/31/2023	06/30/2023
1. Funded Status at Beginning of Interim Period	\$ (2,708,374)	\$ (2,694,410)	\$ (2,680,446)
2. Sum of Service Cost, Interest Cost and Expected Return on Assets	\$ 40,416	\$ 40,416	\$ 40,416
3. Contributions during period ending on Interim Measurement Date ¹	\$ 54,380	\$ 54,380	\$ 54,380
4. Funded Status at End of Interim Period ² [(1) - (2) + (3)]	\$ (2,694,410)	\$ (2,680,446)	\$ (2,666,482)

¹ Assumed based on expected pay-as-you-go contributions to fund retiree benefit payments. Replace with actual employer contributions prior to inclusion in interim period statements of financial position.

² Assuming no interim remeasurement.

Section IV – Disclosure for Fiscal Year Ending September 30, 2022

The information required to be disclosed in your company financial statement is presented in the required format in the remainder of this Section IV in accordance with FASB ASC 715-20-50. FASB ASC 740-10 and FASB ASC 740-20-45 are applied to determine the applicable income tax effects of the funded status of the plan and the adjustments to Accumulated Other Comprehensive Income. This report does not consider deferred income tax effects.

Note that FASB ASC 715-30-35-43 requires that the year-end liability amounts in these reports be calculated using an appropriate discount rate based on September 30, 2022 financial markets. We have used individual spot rates from the full FTSE Pension Discount Curve, resulting in 5.11% as the effective discount rate, for year-end disclosure calculations in accordance with FASB ASC 715-30-35-44, which sets forth the methodology for determining the discount rate based upon the present value of the plan's expected future benefit payments which are discounted using a portfolio of high quality fixed income securities with maturities that match the timing of the expected benefit payments.

To the best of our knowledge, no actions were taken during this period that would cause recognition of a curtailment, a settlement or any special termination benefits under FASB ASC 715-30-35.

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 1,131,374	\$ 4,038,223
b. Service Cost	156,576	158,025
c. Interest Cost	20,293	76,503
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	2,808,130	(1,346,859)
f. Benefits Paid	(78,150)	(217,518)
g. Benefit Obligation at End of Year	\$ 4,038,223	\$ 2,708,374
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 0	\$ 0
b. Return on Plan Assets	0	0
c. Employer Contributions	78,150	217,518
d. Benefits Paid	(78,150)	(217,518)
e. Fair Value of Plan Assets at End of Year	\$ 0	\$ 0
3. Funded Status [2(e) - 1(g)]	\$ (4,038,223)	\$ (2,708,374)
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 0
b. Current Liabilities	(222,783)	(216,586)
c. Noncurrent Liabilities	(3,815,440)	(2,491,788)
d. Funded Status	\$ (4,038,223)	\$ (2,708,374)
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 3,046,321	\$ 1,232,589
b. Prior Service Cost/(Credit)	772,626	725,058
c. Transition Obligation/(Asset)	0	0
d. Accumulated Other Comprehensive Income	\$ 3,818,947	\$ 1,957,647
6. Weighted Average Assumptions used to determine benefit obligations		
a. Effective Discount Rate	2.53% ¹	5.11% ²
b. Rate of Compensation Increase	3.75%	3.90%

¹ The effective discount rate for Service Cost is 2.48% and for Interest Cost is 1.63%.

² The effective discount rate for Service Cost is 2.74% and for Interest Cost is 1.78%.

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 156,576	\$ 158,025
b. Interest Cost	20,293	76,503
c. Expected Return on Plan Assets	0	0
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	47,568	47,568
f. Amortization of Net (Gain)/Loss	24,282	466,873
g. Net Periodic Benefit Cost	\$ 248,719	\$ 748,969
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 2,808,130	\$ (1,346,859)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(24,282)	(466,873)
d. Amortization of Prior Service (Cost)/Credit	(47,568)	(47,568)
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ 2,736,280	\$ (1,861,300)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ 2,984,999	\$ (1,112,331)

Weighted-average assumptions used to determine net periodic benefit cost:

	Fiscal Year Ending	
	09/30/2021	09/30/2022
Effective Discount Rate	2.37%	2.53%
Expected Long-Term Return on Plan Assets	N/A	N/A
Rate of Compensation Increase	3.18%	3.75%

	09/30/2021	09/30/2022
Projected Benefit Obligation	\$ 4,038,223	\$ 2,708,374
Accumulated Benefit Obligation	\$ 3,600,312	\$ 2,665,734
Fair Value of Plan Assets	N/A	N/A

B. Cash Flow Information

For the 2022-2023 fiscal year, the estimated employer contribution is \$216,586.

The following table illustrates the estimated pension benefit payments, which reflect expected future service, as appropriate, that are projected to be paid:

Year(s)	Estimated Benefit Payments
2022-2023	\$ 216,586
2023-2024	214,471
2024-2025	215,752
2025-2026	218,532
2026-2027	219,119
2027-2028 to 2031-2032	1,082,646

C. Additional Disclosures under FASB ASC 715-20-50

1. A portion of the pension liability would be classified as a current liability because the benefit obligations expected to be paid within the 12 months ending September 30, 2023 exceed the value of plan assets by \$216,586.
2. Sources of gains and losses related to changes in the benefit obligation for the fiscal year:

Liability (Gain)/Loss Source	Fiscal Year Ending	
	09/30/2021	09/30/2022
1. Actual Demographic Experience vs. Assumed Experience	\$ 2,981,707	\$ (598,225)
2. Change to Discount Rate	(120,354)	(759,540)
3. Change to Mortality Assumptions	(14,968)	9,891
4. Other Assumption Changes	(38,255)	1,015
5. Total Liability Actuarial (Gain)/Loss	\$ 2,808,130	\$ (1,346,859)

3. There are no other significant changes in the benefit obligation not otherwise apparent in the above disclosures.

Section V – Supporting Information

A. Development of Change in Accumulated Other Comprehensive Income

1. Accumulated Other Comprehensive Income as of previous Fiscal Year End	\$ 3,818,947
2. Change in Accumulated Other Comprehensive Income	
a. Actuarial (Gain)/Loss during Fiscal Year	
i. Liability (Gain)/Loss	\$ (1,346,859)
ii. Asset (Gain)/Loss	0
iii. Total (Gain)/Loss	\$ (1,346,859)
b. Prior Service Cost/(Credit) established during Fiscal Year	\$ 0
c. Amounts Recognized in Expense during Fiscal Year	
i. Net (Gain)/Loss Recognized	\$ 466,873
ii. Net Prior Service Cost/(Credit) Recognized	47,568
iii. Net Transition Obligation/(Asset) Recognized	0
iv. Total	\$ 514,441
d. Change in Accumulated Other Comprehensive Income [(a.iii.) + (b) - (c.iv.)]	\$ (1,861,300)
3. Accumulated Other Comprehensive Income as of Current Fiscal Year End [(1) + (2.d.)]	\$ 1,957,647

B. Amortization of Prior Service Cost/(Credit)

Amendment #1 Dated March 17, 2020

1. PBO after amendment ¹	\$ 845,960
2. PBO before amendment	\$ 0
3. Prior service cost [(1) - (2)]	\$ 845,960

Amortization Schedule ²			
Year	Unrecognized Amount at Beginning of Period	Amount Recognized during the Period	Unrecognized Amount at End of Period
03/17/2020 – 09/30/2020	\$ 845,960	\$ 25,766	\$ 820,194
10/01/2020 – 09/30/2021	820,194	47,568	772,626
10/01/2021 – 09/30/2022	772,626	47,568	725,058
10/01/2022 – 09/30/2023	725,058	47,568	677,490
10/01/2023 – 09/30/2024	677,490	47,568	629,922
10/01/2024 – 09/30/2025	629,922	47,568	582,354
10/01/2025 – 09/30/2026	582,354	47,344	535,010
10/01/2026 – 09/30/2027	535,010	26,488	508,522
10/01/2027 – 09/30/2028	508,522	26,488	482,034
10/01/2028 – 09/30/2029	482,034	26,488	455,546
10/01/2029 – 09/30/2030	455,546	26,488	429,058
10/01/2030 – 09/30/2031	429,058	26,488	402,570
10/01/2031 – 09/30/2032	402,570	26,488	376,082
10/01/2032 – 09/30/2033	376,082	26,488	349,594
10/01/2033 – 09/30/2034	349,594	26,488	323,106
10/01/2034 – 09/30/2035	323,106	26,488	296,618
10/01/2035 – 09/30/2036	296,618	26,488	270,130
10/01/2036 – 09/30/2037	270,130	26,488	243,642
10/01/2037 – 09/30/2038	243,642	26,488	217,154
10/01/2038 – 09/30/2039	217,154	26,488	190,666
10/01/2039 – 09/30/2040	190,666	26,488	164,178
10/01/2040 – 09/30/2041	164,178	26,488	137,690
10/01/2041 – 09/30/2042	137,690	26,488	111,202
10/01/2042 – 09/30/2043	111,202	26,488	84,714
10/01/2043 – 09/30/2044	84,714	26,488	58,226
10/01/2044 – 09/30/2045	58,226	26,488	31,738
10/01/2045 – 09/30/2046	31,738	26,488	5,250
10/01/2046 – 09/30/2047	5,250	5,250	0

¹ PBO as of date of plan adoption.

² Amortization amounts determined separately for each Division and then aggregated, consistent with past accounting methodology used for the employer's Retirement Plan and OPEB plan. For Divisions with only inactive participants, the prior service cost is amortized over average expected future lifetime per FASB ASC 715-30-35-11.

C. Amortization of Net (Gain)/Loss

	End of 2020-2021 Fiscal Year	End of 2021-2022 Fiscal Year
1. Projected Benefit Obligation	\$ 4,038,223	\$ 2,708,374
2. Fair Value of Plan Assets at measurement date	\$ 0	\$ 0
3. Net (Gain)/Loss	\$ 3,046,321	\$ 1,232,589
4. Net (Gain)/Loss not reflected in Market-Related Value		
a. Fair Value	\$ 0	\$ 0
b. Market-Related Value (MRV)	\$ 0	\$ 0
c. Amount included in unrecognized transition obligation or (asset), not yet reflected in MRV	\$ 0	\$ 0
d. Amount not reflected in MRV [(a) - (b) - (c)]	\$ 0	\$ 0
5. Net (Gain)/Loss subject to amortization [(3) + (4d)]	\$ 3,046,321	\$ 1,232,589
6. Greater of (1) or (4b)	\$ 4,038,223	\$ 2,708,374
7. 10% of (6)	\$ 403,822	\$ 270,837
8. Net (Gain)/Loss to be amortized [Excess of (5) over (7)]	\$ 2,642,499	\$ 961,752
9. Average future service of plan participants expected to receive benefits	5.660	6.730
10. Amortization amount [(8)/(9)]	\$ 466,873	\$ 142,905
11. Effective Discount Rate	2.53%	5.11%

D. Other Accounting-Related Information

1. Reconciliation of Unrecognized Net Actuarial (Gain)/Loss:	
a. Unrecognized Net Actuarial (Gain)/Loss as of September 30, 2021	\$ 3,046,321
b. Liability Actuarial (Gain)/Loss	(1,346,859)
c. Asset (Gain)/Loss	0
d. Amount Recognized in Pension Expense	<u>(466,873)</u>
e. Unrecognized Net Actuarial (Gain)/Loss as of September 30, 2022	\$ 1,232,589

2. Reconciliation of Funded Status:	
a. Funded Status as of Beginning of Year	\$ (4,038,223)
b. Total Recognized in Net Periodic Benefit Cost and AOCI	1,112,331
c. Employer Contributions	<u>217,518¹</u>
d. Funded Status at End of Year	\$ (2,708,374)

3. Evaluation of Settlement Accounting Requirement for FYE 09/30/2022:	
a. Service Cost	\$ 158,025
b. Interest Cost	\$ 76,503
c. Annual lump sum distributions, annuity purchases or other settlements	\$ 0
d. Item (a) + Item (b) - Item (c)	\$ 234,528

Item (3.d) is equal to or greater than zero. Settlement Accounting was not required because Settlements were less than the sum of Service Cost and Interest Cost.

¹ Month	Amount
10/2021	\$ 21,174.19
11/2021	18,126.53
12/2021	15,155.22
01/2022	18,050.18
02/2022	18,126.53
03/2022	18,126.53
04/2022	18,126.53
05/2022	18,126.53
06/2022	18,126.53
07/2022	18,126.53
08/2022	18,126.53
09/2022	<u>18,126.53</u>
	\$ 217,518.36

Section VI - Summary of Assets

Assets are held in the QGEBA Trust which is a Grantor Trust within the meaning of Internal Revenue Code §671, and the assets are not considered to be irrevocable since they would be subject to the claims of the company's general creditors in the event of company insolvency (per Section 4 of the Trust Agreement for Citizens Energy Group QGEBA). Thus, the assets are not eligible to be considered plan assets for purposes of FASB ASC 715-20 and 715-30.

Section VII – Actuarial Methods and Assumptions

A. Actuarial Methods

1. Actuarial Funding Method

The Projected Unit Credit Funding Method is used in computing the service cost component of pension expense. The Projected Unit Credit Funding Method computes the projected benefit for each participant at expected retirement age and attributes a pro rata portion of the projected benefit to each year of employment based upon the plan's pattern of accrual. Each participant's Service Cost for the year is the present value of the change in the pro rata portion for the current year. The plan's Service Cost is the sum of all participants' individual service costs.

Each participant's Projected Benefit Obligation (PBO) is the pro rata portion of the projected benefit that is attributed to all prior years of service. The plan's PBO is the sum of all participants' individual PBOs.

Service Cost and Interest Cost are calculated using individual spot rates from the full FTSE Pension Discount Curve rather than using the equivalent single discount rate to determine these amounts.

2. Market-Related Value of Assets

Fair value is equal to the market value of assets as determined by the plan trustee, excluding any receivable contributions made for a prior plan year after the asset valuation date, and net of any payable expenses.

Market-Related Value of Assets equals fair value. However, as of the measurement date there are no assets eligible to be considered plan assets for purposes of FASB ASC 715-20 and 715-30.

B. Actuarial Assumptions

1. Mortality: The active, vested terminated and retired participants of the plan are expected to exhibit mortality in accordance with the following published mortality tables:

- | | |
|--|---|
| a. Pre-retirement Mortality: | Pri-2012 Total Employee Table projected from the 2012 Base Year using the Scale MP-2021 mortality improvement rates |
| b. Post-retirement Mortality: | |
| i. Retired Participants: | Pri-2012 Total Dataset Retiree Table projected from the 2012 base year using Scale MP-2021 mortality improvement rates |
| ii. Contingent Annuitants of Retired Participants: | Pri-2012 Total Dataset Retiree Table prior to Retired Participant death and Contingent Survivor Table after Retired Participant death projected from the 2012 base year using Scale MP-2021 mortality improvement rates |

Rationale: This assumption reflects the Society of Actuaries' most recent study (and updates thereto) on mortality which reflects current trends in mortality and expected mortality improvements.

2. **Termination:** The active participants are assumed to terminate their employment for causes other than death, disability or retirement in accordance with the sample annual rates as illustrated below.

Attained Age	Terminations per 1,000 Participants	
	Corporate Employees	Non-Corporate Employees
20	250	250
25	175	150
30	125	50
35	88	50
40	81	50
45	75	45
50	58	40
55	40	35
60+	40	35

Rationale: This assumption is based on the actuary's review of recent termination experience in this plan, adjusted for future expectations. The experience study was completed in September 2019.

3. **Discount Rate:** The Plan's expected future Projected Benefit Obligation (PBO) cash flows are discounted back to the Plan's measurement date using the spot rates in effect on the measurement date from the FTSE Pension Discount Curve as published on the Society of Actuaries website. The FTSE Pension Discount Curve is used as the hypothetical portfolio of high-quality debt instruments that would provide the necessary PBO cash flows to pay the benefits when due.

Years from Measurement Date	Annual Spot Rate as of 09/30/2022	Years from Measurement Date	Annual Spot Rate as of 09/30/2022	Years from Measurement Date	Annual Spot Rate as of 09/30/2022
0.5	4.16%	10.5	4.94%	20.5	5.64%
1.0	4.66	11.0	4.93	21.0	5.64
1.5	4.71	11.5	4.92	21.5	5.63
2.0	4.65	12.0	4.92	22.0	5.62
2.5	4.68	12.5	4.93	22.5	5.60
3.0	4.72	13.0	4.95	23.0	5.57
3.5	4.72	13.5	4.98	23.5	5.54
4.0	4.71	14.0	5.01	24.0	5.50
4.5	4.71	14.5	5.05	24.5	5.46
5.0	4.73	15.0	5.10	25.0	5.42
5.5	4.77	15.5	5.16	25.5	5.37
6.0	4.80	16.0	5.21	26.0	5.33
6.5	4.82	16.5	5.27	26.5	5.29
7.0	4.83	17.0	5.33	27.0	5.25
7.5	4.84	17.5	5.40	27.5	5.21
8.0	4.85	18.0	5.46	28.0	5.17
8.5	4.87	18.5	5.51	28.5	5.14
9.0	4.89	19.0	5.56	29.0	5.11
9.5	4.92	19.5	5.60	29.5	5.08
10.0	4.95	20.0	5.63	30.0+	5.05

**Equivalent Single Discount Rate for
09/30/2022 Disclosure
and FY2023 NPPC**

5.11%

4. **Expected Long-Term Rate of Return:** N/A

5. **Earnings Progression:** The increase in the levels of participant compensation is assumed to increase in accordance with the annual rates¹ shown below:

Attained Age	Corporate Employees	Non-Corporate Employees
< 30	7.40%	7.65%
30-34	6.15%	5.15%
35-39	5.15%	4.40%
40-44	5.15%	4.15%
45-49	5.15%	3.90%
50-54	3.90%	3.65%
55+	3.65%	3.40%

¹ Includes inflation.

Rationale: This assumption is based on the actuary's review of recent earnings experience, adjusted for inflation as of the measurement date. This assumption was evaluated in an experience study which was completed in September 2019.

6. **Retirement Age:** A participant is assumed to retire in accordance with the annual rates as illustrated below.
- a. For Reduced Benefit Annuitants who are eligible for early commencement but do not meet the Rule of 85:

Age	Retirements Per 1,000 Eligible Participants	
	Corporate Employees	Non-Corporate Employees
45-59	40	25
60	200	50
61	50	50
62	200	100
63	200	250
64	200	150

- b. For Unreduced Benefit Retirees who meet the Rule of 85 or have reached Normal Retirement Age:

Age	Retirements Per 1,000 Eligible Participants															
	Years of Service															
	≤20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	≥35
55											200	200	200	200	200	200
56										250	250	130	130	130	130	130
57									300	300	150	150	150	150	150	150
58								350	350	180	180	180	180	180	180	180
59							400	400	200	200	200	200	200	200	200	200
60						400	400	200	200	200	200	200	200	200	200	200
61					400	400	200	200	200	200	200	200	200	200	200	200
62				400	400	200	200	200	200	200	200	200	200	200	200	200
63			400	400	200	200	200	200	200	200	200	200	200	200	200	200
64		400	400	200	200	200	200	200	200	200	200	200	200	200	200	200
65	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
66	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
67	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
68	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
69	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
70	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Rationale: This assumption is based on the actuary's review of recent retirement experience in this plan, adjusted for future expectations. The experience study was completed in September 2019.

7. **Social Security Taxable Wage Base Increase:** The benefits of this plan are determined, in part, by 35-year averages of the Social Security Taxable Wage Base. The Social Security Taxable Wage Base is assumed to increase at the annual rate of:

For 09/30/2022 Disclosure and FY2023 NPPC
2.90%

Rationale: This assumption is based upon inflation as of the measurement date in addition to the actuary's review of inflation experience since 1948 and the relative relationships between this assumption and national average wage growth.

8. **Disability:** None
9. **Expenses:** Administration and investment expenses necessary to the operation of this plan are assumed to be paid from QGEBA Trust assets.

- 10. Recognition of IRC Benefit and Compensation Limitations:** Consistent with FASB ASC 715-30-35-31, the benefit limitations under IRC Sections 415(b) and 401(a)(17) have been reflected in the determination of plan costs, and these limits are assumed to increase at the rate of:

For 09/30/2022 Disclosure and FY2023 NPPC
2.40%

Rationale: This assumption is based upon inflation as of the measurement date.

- 11. Marital Status:** 80% of participants are assumed to be married at the time of separation from service. Female spouses are assumed to be three years younger than their male counterparts.

- 12. Assumed Form of Payment:** Upon separation from service for causes other than death, 100% of active participants are assumed to elect the normal form of payment.

Surviving spouses of employees who separate from service due to death are assumed to commence payment in the normal form of annuity at the date of the participant's death.

Beneficiaries of non-married employees who separate from service due to death are assumed to receive a lump sum at the date of the participant's death.

Current deferred vested participants are assumed to elect the normal form at normal retirement age.

- 13. Changes in Actuarial Assumptions:** Reflected in this valuation are revised assumptions from the prior valuation as follows:

a. Mortality:

- i. Current: See item B.1. above
- ii. Prior:

Pre-retirement Mortality:

Pri-2012 Total Dataset Employee Table projected from the 2012 base year using Scale MP-2020 mortality improvement rates

Post-retirement Mortality:

a) Retired Participants:

Pri-2012 Total Dataset Retiree Table projected from the 2012 base year using Scale MP-2020 mortality improvement rates

b) Contingent Annuitants
of Retired Participants:

Pri-2012 Total Dataset Retiree Table prior to Retired Participant death and Contingent Survivor Table after Retired Participant death projected from the 2012 base year using Scale MP-2020 mortality improvement rates

- b. Discount Rate:
- i. Current: See item B.3. above
 - ii. Prior: FTSE Pension Discount Curve in effect at September 30, 2021 resulting in an Equivalent Single Discount Rate of 2.53%.
- c. Earnings Progression:
- i. Current: See item B.5. above
 - ii. Prior:

Attained Age	Corporate Employees	Non-Corporate Employees
< 30	7.35%	7.60%
30-34	6.10%	5.10%
35-39	5.10%	4.35%
40-44	5.10%	4.10%
45-49	5.10%	3.85%
50-54	3.85%	3.60%
55+	3.60%	3.35%

- d. Social Security Taxable Wage Base Increase:
- i. Current: 2.90% per year
 - ii. Prior: 2.85% per year
- e. Recognition of IRC Benefit and Compensation Limitations:
- i. Current: 2.40%
 - ii. Prior: 2.35%

Consistent with FASB ASC 715-30-35-42, the changes above were made to reflect the plan sponsor's best estimate of future plan experience and to reflect changes in the yield of high grade corporate fixed income securities. Rudd and Wisdom, Inc. concurs with these assumptions.

Section VIII – Outline of Principal Plan Provisions

A. Identifying Data

1. Plan name: Citizens Energy Group Qualified Governmental Excess Benefit Arrangement
2. Type of plan: Defined benefit under Internal Revenue Code §415(m)(3)
3. Plan sponsor: Citizens Energy Group
4. Plan Year: January 1 - December 31
5. Employer: Citizens Energy Group

B. Participation

Participants in the Citizens Energy Group Retirement Plan (the Retirement Plan) automatically participate in this plan at the time their benefit under the Retirement Plan would exceed the limitations of Internal Revenue Code (IRC) §415(b).

C. Contributions

1. Participant: none
2. Employer: all amounts necessary to adequately finance plan benefits on a pay-as-you-go basis

D. Eligibility for Retirement

1. Normal Retirement: age 65 (first of month coincident with or next following)
2. Early Retirement: age 45 plus 5 years of Vesting Service
3. Disability Retirement: none

E. Benefit Amounts

The excess of (1.) over (2.):

1. the monthly benefit amount determined under the Retirement Plan without regard to the limitations of IRC §415(b)
2. the monthly benefit amount determined under the Retirement Plan

F. Normal Form of Monthly Payment

The benefits under this plan shall be paid in the same form and at the same time as the benefits paid under the Retirement Plan.

G. Other Benefits

All other benefits available under the Retirement Plan (e.g., pre-retirement death benefits) shall apply under this plan following the formula shown under Item E. above. See the separate FASB ASC 715-20 and 715-30 report for the Retirement Plan dated October 19, 2021 for a complete description of the Retirement Plan's benefits and provisions.

Section IX - Glossary

Accumulated Benefit Obligation (ABO): The actuarial present value of benefits (whether vested or nonvested) attributed by the pension benefit formula to employee service rendered before a specified date and based on employee service and compensation (if applicable) prior to that date. The accumulated benefit obligation differs from the projected benefit obligation in that it includes no assumption about future compensation levels. For plans with flat-benefit or non-pay-related pension benefit formulas, the accumulated benefit obligation and the projected benefit obligation are the same.

Amortization: This refers to the systematic recognition in net pension cost over several periods of amounts previously recognized in other comprehensive income, that is, prior service costs or credits, gains or losses, and the transition asset or obligation.

Attribution: The process of assigning pension benefits or cost to periods of employee service.

Curtailment: An event that significantly reduces the expected years of future service of present employees or eliminates for a significant number of employees the accrual of defined benefits for some or all of their future services.

Discount Rate: The interest rate used to adjust for the time value of money.

Expected Long-Term Rate of Return on Plan Assets: An assumption as to the rate of return on plan assets reflecting the average rate of earnings expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation.

Expected Return on Plan Assets: An amount calculated as a basis for determining the extent of delayed recognition of the effects of changes in the fair value of assets. The expected return on plan assets is determined based on the expected long-term rate of return on plan assets and the market-related value of plan assets.

Gain or Loss: A change in the value of either the projected benefit obligation or the plan assets resulting from experience different from that assumed or from a change in an actuarial assumption. Gains and losses that are not recognized in net periodic pension cost when they arise are recognized in other comprehensive income. Those gains or losses are recognized in subsequent years as a component of net periodic pension cost.

Gain or Loss Component (of Net Periodic Pension Cost): The sum of (a) the difference between the actual return on plan assets and the expected return on plan assets and (b) the amortization of the net gain or loss recognized in accumulated other comprehensive income. The gain or loss component is the net effect of delayed recognition of gains and losses in determining net periodic pension cost (the net change in the gain or loss) in accumulated other comprehensive income except that it does not include changes in the projected benefit obligation occurring during the period and deferred for later recognition in net periodic pension cost.

Interest Cost Component (of Net Periodic Pension Cost): The increase in the projected benefit obligation due to passage of time.

Market-Related Value of Plan Assets: A balance used to calculate the expected return on plan assets. Market-related value can be either fair market value or a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years. Different ways of calculating market-related value may be used for different classes of assets, but the manner of determining market-related value shall be applied consistently from year to year for each asset class.

Net Periodic Pension Cost: The amount recognized in an employer's financial statements as the cost of a pension plan for a period. Components of net periodic pension cost are service cost, interest cost, expected return on plan assets, amortization of gain or loss, amortization of prior service cost or credit, and amortization of the transition asset or obligation.

Plan Amendment: A change in the terms of an existing plan or the initiation of a new plan. A plan amendment may increase benefits, including those attributed to years of service already rendered.

Plan Assets: Assets – usually stocks, bonds, and other investments—that have been segregated and restricted (usually in a trust) to provide benefits. Plan assets include amounts contributed by the employer (and by employees for a contributory plan) and amounts earned from investing the contributions, less benefits paid. For purposes of FASB ASC 715-20 and 715-30, assets not segregated in a trust or otherwise effectively restricted so that they cannot be used by the employer for other purposes are not plan assets even though it may be intended that such assets be used to provide pensions.

Prior Service Cost: The cost of retroactive benefits granted in a plan amendment.

Projected Benefit Obligation (PBO): The actuarial present value as of a date of all benefits attributed by the pension benefit formula to employee service rendered prior to that date. The projected benefit obligation is measured using assumptions as to future compensation levels if the pension benefit formula is based on those future compensation levels (pay-related, final-pay, final-average-pay, or career-average-pay plans).

Public Business Entity: An enterprise: (a) whose debt or equity securities are traded in a public market, either on a stock exchange or in the over-the-counter market (including securities quoted only locally or regionally), or (b) whose financial statements are filed with a regulatory agency in preparation for the sale of any class of securities.

Retroactive Benefits: Benefits granted in a plan amendment (or initiation) that are attributed by the pension benefit formula to employee services rendered in periods prior to the amendment. The cost of the retroactive benefits is referred to as prior service cost.

Service Cost Component (of Net Periodic Pension Cost): The actuarial present value of benefits attributed by the pension benefit formula to services rendered by employees during that period. The service cost component is a portion of the projected benefit obligation and is unaffected by the funded status of the plan.

Settlement: An irrevocable action that relieves the employer (or the plan) of primary responsibility for a pension benefit obligation and eliminates significant risks related to the obligation and the assets used to effect the settlement. Examples of transactions that may constitute a settlement include (a)

making lump-sum cash payments to plan participants in exchange for their rights to receive specified pension benefits and (b) purchasing nonparticipating annuity contracts to cover vested benefits.

Statement of Financial Accounting Standards (SFAS) for Pension Accounting prior to Accounting Standards Codification: The expense and disclosure information in this report has been determined in accordance with the applicable sections of FASB ASC 715-20 and 715-30. Prior to Accounting Standards Codification during 2009, expense and disclosure information was determined in accordance with the following accounting standards:

- SFAS No. 87 – Employers’ Accounting for Pensions
- SFAS No. 88 – Employers’ Accounting for Settlement and Curtailment of Defined Benefit Pension Plans and for Termination Benefits
- SFAS No. 132(R) – Employers’ Disclosures about Pensions and Other Postretirement Benefits (revised 2003)
- SFAS No. 158 – Employers’ Accounting for Defined Benefit Pension and Other Postretirement Plans

Appendix:

Disclosure and Expense Results by Division

Division 1: Corporate Shared Services

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 415,924	\$ 2,271,326
b. Service Cost	156,576	158,025
c. Interest Cost	8,354	42,050
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	1,721,074	(950,067)
f. Benefits Paid	<u>(30,602)</u>	<u>(122,407)</u>
g. Benefit Obligation at End of Year	\$ 2,271,326	\$ 1,398,927
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 0	\$ 0
b. Return on Plan Assets	0	0
c. Employer Contributions	30,602	122,407
d. Benefits Paid	<u>(30,602)</u>	<u>(122,407)</u>
e. Fair Value of Plan Assets at End of Year	\$ 0	\$ 0
3. Funded Status [2(e) - 1(g)]	\$ (2,271,326)	\$ (1,398,927)
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 0
b. Current Liabilities	(124,825)	(121,684)
c. Noncurrent Liabilities	<u>(2,146,501)</u>	<u>(1,277,243)</u>
d. Funded Status	\$ (2,271,326)	\$ (1,398,927)
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 1,954,894	\$ 742,232
b. Prior Service Cost/(Credit)	105,176	84,096
c. Transition Obligation/(Asset)	<u>0</u>	<u>0</u>
d. Accumulated Other Comprehensive Income	\$ 2,060,070	\$ 826,328
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.53%	5.11%
b. Rate of Compensation Increase	3.75%	3.90%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 156,576	\$ 158,025
b. Interest Cost	8,354	42,050
c. Expected Return on Plan Assets	0	0
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	21,080	21,080
f. Amortization of Net (Gain)/Loss	8,927	262,595
g. Net Periodic Benefit Cost	\$ 194,937	\$ 483,750
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 1,721,074	\$ (950,067)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(8,927)	(262,595)
d. Amortization of Prior Service (Cost)/Credit	(21,080)	(21,080)
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ 1,691,067	\$ (1,233,742)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ 1,886,004	\$ (749,992)
9. Accumulated Benefit Obligation	\$ 1,833,415	\$ 1,356,287

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 33,949
2. Interest Cost		65,283
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 0	
b. Expected distributions, weighted for timing	(121,684)	
c. Expected contributions, weighted for timing	121,684 ²	
d. Expected Return Basis	\$ 0	
e. Long-term rate of return	N/A	
f. Expected Return on Assets [-(d) x (e)]		0
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		21,080
6. Amortization of Net (Gain)/Loss		<u>73,813</u>
7. Net Periodic Pension Cost		\$ 194,125

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a subsequent mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

² Expected pay-as-you-go contributions to cover benefit payments as they come due for retired participants.

Division 2: Gas

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 715,450	\$ 675,912
b. Service Cost	0	0
c. Interest Cost	11,939	13,252
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	(18,793)	(155,439)
f. Benefits Paid	<u>(32,684)</u>	<u>(35,656)</u>
g. Benefit Obligation at End of Year	\$ 675,912	\$ 498,069
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 0	\$ 0
b. Return on Plan Assets	0	0
c. Employer Contributions	32,684	35,656
d. Benefits Paid	<u>(32,684)</u>	<u>(35,656)</u>
e. Fair Value of Plan Assets at End of Year	\$ 0	\$ 0
3. Funded Status [2(e) - 1(g)]	\$ (675,912)	\$ (498,069)
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 0
b. Current Liabilities	(38,631)	(35,581)
c. Noncurrent Liabilities	<u>(637,281)</u>	<u>(462,488)</u>
d. Funded Status	\$ (675,912)	\$ (498,069)
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (14,422)	\$ (248,006)
b. Prior Service Cost/(Credit)	667,450	640,962
c. Transition Obligation/(Asset)	<u>0</u>	<u>0</u>
d. Accumulated Other Comprehensive Income	\$ 653,028	\$ 392,956
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.53%	5.11%
b. Rate of Compensation Increase	3.75%	3.90%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 0	\$ 0
b. Interest Cost	11,939	13,252
c. Expected Return on Plan Assets	0	0
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	26,488	26,488
f. Amortization of Net (Gain)/Loss	15,355	78,145
g. Net Periodic Benefit Cost	\$ 53,782	\$ 117,885
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ (18,793)	\$ (155,439)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	(15,355)	(78,145)
d. Amortization of Prior Service (Cost)/Credit	(26,488)	(26,488)
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ (60,636)	\$ (260,072)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ (6,854)	\$ (142,187)
9. Accumulated Benefit Obligation	\$ 675,912	\$ 498,069

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 0
2. Interest Cost		23,780
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 0	
b. Expected distributions, weighted for timing	(35,581)	
c. Expected contributions, weighted for timing	<u>35,581</u> ²	
d. Expected Return Basis	\$ 0	
e. Long-term rate of return	N/A	
f. Expected Return on Assets [-(d) x (e)]		0
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		26,488
6. Amortization of Net (Gain)/Loss		<u>26,280</u>
7. Net Periodic Pension Cost		\$ 76,548

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a subsequent mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

² Expected pay-as-you-go contributions to cover benefit payments as they come due for retired participants.

Division 20: Water Company

A. Reconciliation of Benefit Obligations, Plan Assets and Balance Sheet Position (Prior to any Deferred Tax Recognitions)

	Measurement Year Ending	
	09/30/2021	09/30/2022
1. Reconciliation of beginning and ending balances of the Benefit Obligation		
a. Benefit Obligation at Beginning of Year	\$ 0	\$ 1,090,985
b. Service Cost	0	0
c. Interest Cost	0	21,201
d. Amendments	0	0
e. Liability Actuarial (Gain)/Loss	1,105,849	(241,353)
f. Benefits Paid	(14,864)	(59,455)
g. Benefit Obligation at End of Year	\$ 1,090,985	\$ 811,378
2. Reconciliation of beginning and ending balances of Plan Assets		
a. Fair Value of Plan Assets at Beginning of Year	\$ 0	\$ 0
b. Return on Plan Assets	0	0
c. Employer Contributions	14,864	59,455
d. Benefits Paid	(14,864)	(59,455)
e. Fair Value of Plan Assets at End of Year	\$ 0	\$ 0
3. Funded Status [2(e) - 1(g)]	\$ (1,090,985)	\$ (811,378)
4. Amounts Recognized in the Statement of Financial Position		
a. Noncurrent Assets	\$ 0	\$ 0
b. Current Liabilities	(59,327)	(59,321)
c. Noncurrent Liabilities	(1,031,658)	(752,057)
d. Funded Status	\$ (1,090,985)	\$ (811,378)
5. Amounts Recognized in Accumulated Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 1,105,849	\$ 738,363
b. Prior Service Cost/(Credit)	0	0
c. Transition Obligation/(Asset)	0	0
d. Accumulated Other Comprehensive Income	\$ 1,105,849	\$ 738,363
6. Weighted Average Assumptions used to determine benefit obligations		
a. Discount Rate	2.53%	5.11%
b. Rate of Compensation Increase	3.75%	3.90%

	Fiscal Year Ending	
	09/30/2021	09/30/2022
7. Components of Net Periodic Benefit Cost		
a. Service Cost	\$ 0	\$ 0
b. Interest Cost	0	21,201
c. Expected Return on Plan Assets	0	0
d. Amortization of Transition Obligation/(Asset)	0	0
e. Amortization of Prior Service Cost/(Credit)	0	0
f. Amortization of Net (Gain)/Loss	0	126,133
g. Net Periodic Benefit Cost	\$ 0	\$ 147,334
8. Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
a. Net (Gain)/Loss	\$ 1,105,849	\$ (241,353)
b. Prior Service Cost/(Credit)	0	0
c. Amortization of Net Gain/(Loss)	0	(126,133)
d. Amortization of Prior Service (Cost)/Credit	0	0
e. Amortization of Transition (Obligation)/Asset	0	0
f. Total Recognized in Other Comprehensive Income	\$ 1,105,849	\$ (367,486)
g. Total Recognized in Net Periodic Benefit Cost and Accumulated Other Comprehensive Income [7(g) + 8(f)]	\$ 1,105,849	\$ (220,152)
9. Accumulated Benefit Obligation	\$ 1,090,985	\$ 811,378

B. Determination of Net Periodic Pension Cost for the Fiscal Year Ending September 30, 2023¹

1. Service Cost		\$ 0
2. Interest Cost		38,653
3. Expected Return on Assets		
a. Market-Related Value at beginning of year	\$ 0	
b. Expected distributions, weighted for timing	(59,321)	
c. Expected contributions, weighted for timing	<u>59,321</u> ²	
d. Expected Return Basis	\$ 0	
e. Long-term rate of return	N/A	
f. Expected Return on Assets [-(d) x (e)]		0
4. Amortization of Transition Obligation/(Asset)		0
5. Amortization of Prior Service Cost/(Credit)		0
6. Amortization of Net (Gain)/Loss		<u>42,812</u>
7. Net Periodic Pension Cost		\$ 81,465

¹ Actual expense for the 2022-2023 fiscal year may differ from this amount if a subsequent mid-year event requires a remeasurement for expense (e.g., a plan amendment, a curtailment or a settlement).

² Expected pay-as-you-go contributions to cover benefit payments as they come due for retired participants.