Exhibit $\qquad$

## RETIREMENT PLAN ACCOUNTING

November 1, 2023

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## I. INTRODUCTION AND QUALIFICATIONS

## Q. Please state your name and business address.

A. I am Patrick L. Cutshall, and my business address is 30 West Superior Street, Duluth, Minnesota 55802.
Q. What is your present position with ALLETE, Inc.?
A. I am the Vice President and Corporate Treasurer of ALLETE, Inc., doing business as Minnesota Power ("Minnesota Power" or the "Company").
Q. Please describe your educational background and work experience with ALLETE, Inc. and Minnesota Power.
A. I have 36 years of experience in finance. I earned a Bachelor's degree in accounting from the University of Minnesota Duluth in 1987 and have the professional designations of a CPA (Certified Public Accountant), which is currently inactive, and a CFA (Chartered Financial Analyst). I began my career at ALLETE in 1989 as an Accounting Analyst and became an Investment Analyst in my first year. I was promoted to the position of Retirement Fund Manager in 2003, to Director of Investments and Tax in 2014, and most recently to Vice President and Corporate Treasurer. Prior to my employment at ALLETE, I worked as a CPA for Ernst \& Whinney, a predecessor to Ernst \& Young LLP.

## Q. What are your present duties as Vice President and Corporate Treasurer of

 ALLETE?A. As Vice President and Corporate Treasurer, I am responsible for raising capital (including both debt and equity), banking and bank relationships, credit rating relationships, financial analysis, long-range financial forecasts, cash management, benefit plan investments, purchasing, rates, and tax.

## Q. What is the purpose of the testimony you are presenting on behalf of Minnesota Power?

A. My testimony will address Minnesota Power's proposals with respect to recovery of test year pension and other post-employment benefit ("OPEB") expense and provide support for the Company's request to include Minnesota Power's accumulated contributions in excess of net periodic benefit cost for the pension in rate base.

My testimony provides support for Minnesota Power's forecasted 2024 test year pension expense of $\$ 7,442,304$ ALLETE ( $\$ 4,751,507$ Minnesota Power regulated ("MP regulated"); $\$ 4,228,176$ Minnesota jurisdictional ("MN Jurisdictional")) and OPEB expense of negative $\$ 10,186,961$ ALLETE (negative $\$ 7,337,814 \mathrm{MP}$ regulated; negative $\$ 6,529,627 \mathrm{MN}$ Jurisdictional), for an overall negative retirement benefit expense of $\$ 2,301,451 .{ }^{1}$ This overall negative expense results in reduced customer rates (i.e., customers are paid) while retirees and employees receive benefits, which is not sustainable. I explain why the Company believes it is reasonable to establish pension and OPEB expense based on our best estimate of current costs for the pension and OPEB plans.

I also support the inclusion in rate base of the Company's 13-month average 2024 test year balance of the pension accumulated contributions in excess of net periodic benefit costs (also known as prepaid pension asset) of $\$ 86,688,516 \mathrm{MN}$ Jurisdictional, net of the associated accumulated deferred income taxes ("ADIT") asset of \$29,744,250 MN Jurisdictional, or $\$ 56,944,267 \mathrm{MN}$ Jurisdictional to be allowed to earn a weighted average cost of capital ("WACC") return. This outcome is consistent with standard ratemaking treatment for other rate base items, provides fairness for the use of investor capital, supports critical credit ratings, and is warranted because the Company's levels of contributions are mandated, as discussed further in my testimony. I note that the issue of including the prepaid pension asset in rate base for purposes of earning a return on the Company contributions that have not been funded by customers is currently

[^0]pending before the Minnesota Court of Appeals. The appeals process may ultimately impact this issue, but the final outcome is not known as of the time of this filing.

While the prepaid OPEB was also denied in Minnesota Power's 2021 Rate Case, Docket No. E015/GR-21-335 ("2021 Rate Case"), due to the smaller impact and in the interest of reducing the number of issues in the case, the Company has chosen not to request a return on that item in this proceeding.

## Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring the following schedules to my Direct Testimony:

- MP Exhibit ___ (Cutshall), Direct Schedule 1 - Prepaid Pension Roll Forward (Years 1987-2024 Test Year);
- MP Exhibit __ (Cutshall), Direct Schedule 2 - Willis Towers Watson ("WTW") Expected Return Estimator Summary - Pension (April 2023);
- MP Exhibit ___ (Cutshall), Direct Schedule 3 - EEI Member Companies, Per Company's 2022 Annual Reports, Expected Return on Plan Assets;
- MP Exhibit ___ (Cutshall), Direct Schedule 4 - EEI Pension and OPEB Survey 2022-2023 and Select Results;
- MP Exhibit ___ (Cutshall), Direct Schedule 5 - Prepaid Pension Asset Requirements (2024 Test Year);
- MP Exhibit ___ (Cutshall), Direct Schedule 6 - Customer Benefits from Prepaid Pension Assets (Years 1987-2024 Test Year);
- MP Exhibit ___ (Cutshall), Direct Schedule 7 - WTW Actuarial Valuation Report - Qualified Retirement Plans (2022 Disclosures; 2023 Costs);
- MP Exhibit __ (Cutshall), Direct Schedule 8 - WTW Expected Return Estimator Summary - OPEB (April 2023);
- MP Exhibit ___ (Cutshall), Direct Schedule 9-2022 WTW Actuarial Valuation Report - Postretirement Welfare Plans (2022 Disclosures; 2023 Costs); and
- MP Exhibit ___ (Cutshall), Direct Schedule 10 - 2022 Form 10-K Independent Auditor Report.


## Q. Are there other schedules in the rate filing that support your testimony?

A. No.

## II. PENSION

## Q. What is the purpose of this section of your Direct Testimony?

A. In this section of my testimony, I explain the Company's pension plans, the accounting for the pension plans, how the Company's pension expense amounts for the 2024 test year were derived, as well as the resulting accumulated contributions in excess of net periodic benefit cost. The Direct Testimony of Company witness Ms. Laura E. Krollman provides background information on overall compensation, including how retirement plans fit into the Company's overall compensation management strategy.

## A. Pension Accounting

## Q. How many qualified pension plans does ALLETE have?

A. Company witness Ms. Krollman discusses the Company's qualified pension plans and plan components in her Direct Testimony. In summary, for purposes of my testimony, ALLETE has two qualified pension plans - Plans B and C, collectively referred to as ALLETE's pension or pension plan - with the former Plan A rolled into Plan C in late 2018:

- Plan A - "non-bargaining plan": as a cost-savings measure, all benefits in Plan A were frozen effective November 30, 2018, and Plan A was merged into Plan C on December 31, 2018. Thus, Plan A no longer exists;
- Plan B - "bargaining plan" was closed to new participants on January 31, 2011, and only covers bargaining unit employees hired prior to February 1, 2011; and
- Plan C - "inactive plan," for all non-bargaining participants, retired participants-including surviving spouses, and bargaining unit participants or retirees-including surviving spouses-who were no longer represented by the union contract as of December 31, 2015. No new benefits are earned by participants in this plan.


## Q. How are the pension benefits paid to Minnesota Power employees funded?

A. They are funded as follows:

- Contributions are made to the pension trust from Company funds and are determined separate and apart from the annual expense.
- Traditionally, the Company has recovered through rates its annual pension and OPEB expense, which does not reflect the value of additional contributions to the pension fund made by the Company. This mismatch of plan funding and recovery has resulted in the Company's cumulative funding exceeding the recovery of those costs from customers. This requires the Company to raise capital (either debt or equity) to finance these contributions until ultimately recovered.


## Q. How are ALLETE's pension plan contributions and expense levels determined?

A. Two different authorities govern the amounts of the Company's contributions to its pension plan and annual pension expense. Contributions to the pension plan must comply with the funding requirements of the Employee Retirement Income Security Act of 1974 ("ERISA") and the Internal Revenue Code ("IRC"), including the provisions of the Pension Protection Act of 2006 ("PPA"), which has been updated multiple times. The latest change was part of the American Rescue Plan Act of 2021.

The pension expense is determined by Generally Accepted Accounting Principles ("GAAP") set forth by the Financial Accounting Standards Board ("FASB") and adopted by the U.S. Securities and Exchange Commission ("SEC"). Minnesota Power's actuary, Willis Towers Watson ("WTW"), calculates the Company's pension expense using actuarial analyses, which are performed in accordance with Accounting Standards Codification ("ASC") 715-30 Defined Benefit Plans - Pension.

ASC 715-30 requires the pension expense for a given year to be determined on an annual basis. The Company engages a qualified actuary to calculate its pension expense. The Company's independent auditor, PricewaterhouseCoopers, LLP ("PwC"), assesses WTW's qualifications as an actuarial specialist in connection with its audit. In addition,

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Cutshall Direct and Schedules

PWC audits the actuarial assumptions used and management's internal control procedures to ensure compliance with GAAP. ASC 715-30 requires that every actuarial assumption used to determine the expense represents the Company's best estimate of its future experience. PwC has always found the actuarial assumptions applied to be in accordance with GAAP.

## Q. What are SFAS and ASC, and why are they important?

A. SFAS is the acronym for "statements of financial accounting standards." It is usually used with a number after it, which is the pronouncement number. These pronouncements were created by the FASB, which is the "independent, private-sector, not-for-profit organization . . . that establishes financial accounting and reporting standards for public and private companies and not-for-profit organizations that follow [GAAP]. The FASB is recognized by the [SEC] as the designated accounting standard setter for public companies." ${ }^{2}$

In September 2006, the FASB issued SFAS 158, which required employers to recognize the funded status of their defined benefit pension and other postretirement plans on their consolidated balance sheet. SFAS 158 also required employers to recognize as a component of other comprehensive income, net of tax, the gains or losses and prior service costs or credits that arise during the period but that are not recognized as components of net periodic benefit cost in the current period. Such gains and losses are amortized as a component of pension and OPEB expense in future periods. The pronouncement also required additional disclosures in the notes to financial statements. ${ }^{3}$ SFAS 158 was effective for fiscal years ending after December 15, 2006.

In 2009, the FASB moved from a SFAS structure to the current ASC structure. This change did not alter GAAP but did provide a new topical structure that was designed to make GAAP requirements easier to locate. SFAS 158 was re-codified as part of ASC

[^1]Q. How is the Minnesota Jurisdictional portion of pension expense and contributions derived from the ALLETE totals?
A. As described in more detail below, Minnesota Power's actuary, WTW, calculates ALLETE's-as well as Superior Water, Light and Power's ("SWLP")—pension expense, contributions, accumulated contributions in excess of net periodic benefit cost, etc. using actuarial analyses. To determine the MN Jurisdictional amounts, we first start with the ALLETE total and subtract out subsidiaries (SWLP and ALLETE Clean Energy) to get to Minnesota Power's allocation. We then apply a regulated allocator to remove 1) the non-regulated Minnesota Power portion and 2) the capitalized amounts in order to arrive at MP regulated (also called "Total Company") pension expense/contributions. We then apply the MN Jurisdictional allocator to get to the amount we are requesting in this general rate case. The calculation for pension expense and contributions for the 2024 test year is provided below in Table 1.

Table 1. Allocation - Test Year 2024

|  | Expense | Contribution |
| :--- | ---: | :---: |
| ALLETE | $\$ 7,442,304$ | $\$ 24,659,231$ |
| Less: Subsidiaries | $1,373,581$ | $3,896,771$ |
| Minnesota Power | $\$ 6,068,723$ | $\$ 20,762,460$ |
| x Regulated Allocator | $78.295 \%$ | $78.295 \%$ |
| MP Regulated | $\$ 4,751,507$ | $\$ 16,255,968$ |
| MN Jurisdictional Allocator | $88.986 \%$ | $88.986 \%$ |
| MN Jurisdictional | $\mathbf{\$ 4 , 2 2 8 , 1 7 6}$ | $\mathbf{\$ 1 4 , 4 6 5 , 5 3 6}$ |

715 (Compensation—Retirement Benefits). The Direct Testimony of Company witness Mr. Michael Farrell of WTW discusses these matters in more detail.
Q. Conversely, how are the subsidiary amounts determined for pension expense and contributions?
A. As mentioned above, WTW calculates SWLP's pension expense, contributions, accumulated contributions in excess of net periodic benefit cost, etc. using actuarial analyses. Due to its small number of eligible pension plan participants, ALLETE's other subsidiary, ALLETE Clean Energy, is allocated expense based on its proportion of pension-eligible salaries to ALLETE's total pension eligible salaries. ALLETE Clean Energy makes contributions to the plan equal to its expense each year; therefore, ALLETE Clean Energy does not have an accumulated contributions in excess of net periodic benefit cost balance.

## B. Pension Expense

Q. What amount of pension expense is included in Minnesota Power's 2024 test year budget?
A. The 2024 pension expense is projected to be $\$ 7,442,304$ for ALLETE ( $\$ 4,751,507$ MP regulated), which equates to $\$ 4,228,176 \mathrm{MN}$ Jurisdictional pension expense in the 2024 test year. The Company recommends including the 2024 test year pension expense, which is the same approach approved in the 2021 Rate Case as discussed below. In addition, later in my testimony, you will see in Figure 3 that the Company's test year pension expense, which is an actuarially determined estimate, has been an excellent predictor of actual pension expense, and supported by Department of Commerce witness Ms. Nancy Campbell in her 2021 Rate Case rebuttal testimony. ${ }^{4}$
Q. How was the Company's 2022 test year pension expense established in Minnesota Power's last approved rate case, the 2021 Rate Case?
A. In the 2021 Rate Case, the Department of Commerce recommended using Minnesota Power's 2022 test year pension expense based on a December 31, 2021 measurement date. (Under ASC 715, the measurement date is required to be as of a company's fiscal year end date. The following year's expense is based on conditions as of that date). The

[^2]Minnesota Public Utilities Commission ("Commission") agreed. After updating for the jurisdictional allocator changes in the proceeding, the pension expense amount included in rates was $\$ 3,186,553 \mathrm{MN}$ Jurisdictional.

## Q. Can you provide more information about the Company's historical pension

 expense?A. Yes. In MP Exhibit $\qquad$ (Cutshall), Direct Schedule 1, I have compiled a historical schedule of pertinent pension information-such as contributions, expense, and rate case recovery starting in 1987. The main source of this data is actuarial documentation reconciled to the general ledger, which presents a reasonable and accurate view of the available information. In addition, the ALLETE amounts in MP Exhibit ___ (Cutshall), Direct Schedule 1 also agree to the Company's annual audited financial statements.

## Q. Has the Company taken any steps in recent years to contain its pension expense?

A. Yes. Below is a summary of the steps Minnesota Power has taken to reduce customer costs by lowering its pension expense. Company witness Ms. Krollman also discusses some of these changes in her Direct Testimony.

- Closed Plan A to new entrants - October 1, 2006;
- Closed Plan B to new entrants - February 1, 2011;
- Determined discount rate using Mercer Bond Model to support a higher discount rate, lowering liabilities and overall expense - 2014;
- Created Plan C - Effective January 1, 2016. The purpose of creating Plan C was to restructure Plan A and Plan B into a third plan (Plan C) for inactive participants in order to deliver benefits in a more cost-effective manner. Plan C was established to place all participants not accruing benefits into one plan with the assets and liabilities associated with those accrued benefits. The benefits from creating Plan C were: 1) to create a plan that could, if so desired, be more easily annuitized when the opportunity arises-thus reducing risk to the Company; 2) to take advantage of provisions within ASC 715-30 that allow a longer amortization period for losses within the pension calculation for plans covering only inactive participants; and 3) as to some participants who received
benefits under both Plan A and Plan B, placing them into Plan C meant they were paid out of only one plan-reducing the Company's Pension Benefit Guarantee Corporation premiums paid for by the plans. Accordingly, certain assets and liabilities were transferred from Plans A and B to Plan C with this change. Because no new Minnesota Power employees are eligible for pension benefits, this was just a shifting of participants from one plan to another plan;
- In 2017, to limit the Company's long-term liability and reduce premiums to the Pension Benefit Guarantee Corporation, the Company offered terminated employees the option of a lump sum buyout for vested pension benefits; and
- ALLETE froze the final average earnings for all non-union pension plan participants effective November 30, 2018.


## Q. Generally speaking, what are the components of ALLETE's pension expense calculation?

A. ALLETE's pension expense is determined by calculating and aggregating five components:

1. Service Cost - The present value (using the discount rate as described below) of the projected retirement benefits earned by each employee in the current year;
2. Interest Cost - The amount that the present value (using the discount rate as described below) of future benefit payments is expected to increase during the year due to interest accrual over a one-year period. In other words, this is the expense incurred because employees are one year closer to receiving benefits;
3. Expected Return on Plan Assets - The amount expected to be earned on the plan's assets. It is estimated by multiplying the Long-Term Expected Return on Assets ("EROA") by the five-year smoothed pension asset balance;
4. Amortization of Prior Service Cost - The cost of increased/(decreased) benefits that result from plan amendments, amortized over the remaining service life of the affected participants; and
5. Amortization of Net Gain or Loss - Gains or losses accumulated when the annual change in the benefit obligation or the plan assets (which both affect funded status) deviates from expectations, e.g., the difference between the prior
years' actual return on plan assets versus the prior years' Expected Return on Plan Assets. If these accumulated gains or losses exceed 10 percent of the greater of the benefit obligation or smoothed value of plan assets, the excess is amortized over a period of time based on participant demographics.

## Q. What information did the actuaries use to calculate the annual pension expense for the 2024 test year?

A. The primary pension assumptions used by WTW to estimate the Company's 2024 pension expense using a weighted average of both plans are listed below:

- Discount rate of 5.42 percent: ALLETE determines the discount rate by considering a number of factors, though the primary consideration is the discount rate suggested by WTW's U.S. BOND:Link Model. This model creates a hypothetical portfolio of AA or better rated corporate bonds such that subsequent cash flows produced are sufficient to fund projected plan benefit payments. The discount rate is set equal to the yield on this hypothetical portfolio. The bonds in the model reflect the requirements of ASC 715-30 (as defined by the SEC) to utilize rates of high-quality debt securities. This methodology is more precise than a simple yield curve approach, is one of the more selective approaches allowed by the SEC, and typically results in a higher discount rate (lower expense);
- 2024 contributions of $\$ 24.7$ million ALLETE ( $\$ 16.3$ million MP regulated; \$14.5 million MN Jurisdictional);
- EROA of 6.63 percent: The 6.63 percent rate is within the range that WTW considers to be reasonable, using WTW's passive investment projections for ALLETE's pension asset allocation, which has an approximate fixed-asset allocation of 50 percent. WTW's net of fee mid- or 50th percentile projection for ALLETE's portfolio is 6.8 percent, but WTW can generally support using a return that is within 50 basis points of this rate. (See MP Exhibit $\qquad$ (Cutshall), Direct Schedule 2); and
- Inflation: All ALLETE retirees receiving a benefit from the pension plans are eligible for twice yearly Cost-of-Living adjustments ("COLA") to their annuity.

This increase is limited to a three percent cumulative annual increase. Due to persistently low inflation for the past decade, the net COLA increase for most retirees has been well below the three percent cap. Therefore, the recent increase in inflation rates have resulted in annual annuity increases well above three percent (i.e., large increases are permitted given the gap between the cumulative annual increase since retirement and the three percent cap). To determine test year 2024 expense, the estimated inflation rate for 2023 of 4 percent was recognized, along with a long-term expected inflation of 2.5 percent.

## Q. Besides WTW's return projection, was there other supportable evidence for the EROA for the plan?

A. Yes. As stated above, 6.63 percent is within a range of reasonable return assumptions using WTW's passive investment projection for ALLETE's approximate 50 percent asset allocation to fixed income. In addition, the Company retrieved pension data from all investor-owned electric utilities in the Edison Electric Institute ("EEI") through their 2022 annual reports (SEC required Form 10-K reports). We then created a schedule showing the electric utility companies' names, pension investment allocations to fixed income, and the EROA (see MP Exhibit ___ (Cutshall), Direct Schedule 3). The average pension return of 6.48 percent on Direct Schedule 3 materially agrees with the average pension return of 6.4 percent reported in the most recent EEI 2022-2023 Pension and Other Post-Employment Benefits Survey (see MP Exhibit ___ (Cutshall), Direct Schedule 4). As expected, both schedules show that pensions with higher investment allocations to fixed income as a whole have a lower EROA. This is because fixed income investments have less risk than equity investments and, therefore, have a lower expected return.

Based on WTW's projections, an increase in return expectations for a typical plan's asset allocation from 2022 to 2024 resulted in a 71 basis point increase. Since other utility 2022 EROAs are not available from annual reports or EEI, we utilized WTW's 71 basis point increase in EROA and applied it to the 2022 EEI peer information to get each EEI utility companies' 2024 projected EROA. The projected 2024 EROA for a
plan with a fixed income asset allocation of 50 percent (ALLETE's approximate asset allocation) would be 6.78 percent, versus ALLETE's weighted average EROA of 6.63 percent (the Company's 2024 expected EROA).

In addition, Figure 1 below is a scatter graph showing ALLETE's and the EEI utilities' pension plans' fixed income allocations compared to each company's plans' projected 2024 EROA. The scatter graph includes a best-fit trend line (using Microsoft Excel's TREND function) which visually shows the same relationship.

This function uses the "least squares" method to calculate a straight line that best fits the data. The equation for the line is: $\mathrm{y}=\mathrm{mx}+\mathrm{b}$.

Where:
$\mathrm{y}=$ trend line return for a fixed asset allocation $=6.78$ percent
$\mathrm{m}=$ the slope determined by Excel SLOPE function $=-4.83$ percent
$\mathrm{x}=$ percent a portfolio is allocated to fixed income $=$ ALLETE portfolio $\sim 50$ percent
$b=$ intercept determined by Excel INTERCEPT function $=9.19$ percent

Figure 1. Pension Fixed Income Allocation vs. EROA - 2024

Q. What do you expect ALLETE's EROA would be using the trend line equation?
A. Figure 1 visually demonstrates that ALLETE's 2024 expected EROA (the blue square) is for all material purposes what would be expected using the trend line of the average utility with the same allocation, so it is very consistent with the 2024 EROA trend line expectations.

## Q. Why does the Company's plan have an approximate 50 percent allocation to fixed income?

A. The goal of pension plan investing is to balance the attainment of maximum investment returns with the management of risk for the plan. Many people understand from their personal financial advisors for personal $401(\mathrm{k})$ investment allocations that one should reduce risk as retirement approaches by gradually switching to less risky, fixed-incometype investments from riskier equity-type investments. Aging investors nearing retirement have less opportunity or time to recover from a loss due to their shorter time horizon. Furthermore, corporate pension sponsors, like ALLETE, are required to measure the assets against the liabilities each year-end, with fluctuations recorded on the balance sheet and in annual cost measurements. This further increases the need to reduce risk as the plan becomes more fully funded (this is known as "Liability Driven Investing"), to reduce annual volatility for shareholders.

This scenario is no different for pension plans that "age." A pension plan that is openmeaning that new employees get pension benefits and participants accrue benefitsdoes not "age" significantly from year to year. However, once pension plans close and/or freeze benefits-as is the case for ALLETE's plan-such plans have similar risk aging characteristics and a shorter time horizon.

In November 2013, with the help of Mercer US Inc. ("Mercer"), ${ }^{5}$ ALLETE adopted an investment policy that reduces risk over time as the plan becomes more funded. The policy uses a dynamic asset allocation over time commonly referred to as an investment

[^3]"glide path." In early 2021-as requested by ALLETE-Mercer conducted an asset allocation study, which confirmed that the glide path being used was substantially appropriate. Minimal changes were implemented as a result of the updated study, including managing the plans' asset allocation and glide path separately.

Taking the increasing maturity of the plans into consideration, ALLETE has made a commitment to lowering the risk of the investment by gradually increasing allocation to fixed income. It does this by allocating a higher percentage of the portfolio's assets to fixed income assets as the plan achieves higher funded trigger levels. Thus, ALLETE's combined plans' approximate 50 percent allocation to fixed income is a result of ALLETE prudently adopting and following the investment policy glide path for the plans given the funded status of the pension plans and their frozen benefit status.

## Q. Has ALLETE's plan reached any trigger points in recent years?

A. Yes. Due to contributions, robust equity markets, and an increase in interest rates, the plan attained two trigger points in the first quarter of 2018. The first trigger point was at the 85 percent funded level in January 2018; therefore, following the investment policy glide path, the plan's fixed income asset allocation was increased to approximately 45 percent. The second trigger point was initiated at the 90 percent funded level in February 2018, increasing the plan's fixed income asset allocation to approximately 60 percent. Since then-with the 2021 revised asset allocation study mentioned previously-where Plans B and C are managed separately, the pension fund's fixed income allocation was reduced to approximately 50 percent with the implementation of the new policy ranges.

## Q. Are there other benefits of a pension owning fixed income investments?

A. Yes. Pension expenses and liabilities are directly and directionally sensitive to interest rate changes; however, both pension liability values and fixed income asset prices are inversely sensitive to interest rate movements (e.g., interest rates go down, causing fixed income asset prices to increase). Therefore, a pension that invests in more fixed income assets, all other things being equal, will hedge more of the interest rate risk inherent in
a pension plan's liability, which provides an additional risk reducing benefit. As mentioned above, this characteristic of matching a pension's assets to its liabilities, called Liability Driven Investing, is what ALLETE's pension policy is accomplishing over time. As the plan becomes more fully funded, the Company is transitioning its assets from return seeking to liability hedging.

## Q. What is the benefit of Liability Driven Investing?

A. Liability Driven Investing means the assets of a plan mimic the liabilities of the plan. It is impossible for a pension to have perfect Liability Driven Investing because all the future variables of the assets and liabilities, such as participants' life spans, cannot be predicted perfectly. However, for the five main pension expense components, ${ }^{6}$ explained previously, fixed income investments when appropriately stratified by maturity-or in technical terms, duration-are the best investments to mimic the liabilities. This is because all five of the pension expense components are driven by interest rates, return on assets, or both-which are the same drivers of fixed income returns. Because of this, adjusting fixed income assets through Liability Driven Investing reduces expense volatility through matching interest cost and EROA while also mitigating risk of additional loss amortizations.

## Q. What is the benefit of the EROA to customers?

A. When the Company makes contributions to the pension fund, those funds are assumed to earn the EROA-which is then incorporated into the revenue requirement and reduces the funds customers pay to cover annual pension expense. This reduction in pension expense is a direct benefit to customers, who cover the annual pension expense in rates. It is not a benefit to Company investors as they do not receive the benefits of the EROA and related Expected Return on Plan Assets and (presently) are not compensated for their cumulative contributions to the pension fund that exceed cumulative expense. In addition, because the pension plan assets are required to be in a restricted trust, the Company has no ability to utilize those assets (i.e., the returns on the

[^4]|  | $\mathbf{2 0 2 2}$ <br> ALLETE <br> Actual | $\mathbf{2 0 2 4}$ <br> ALLETE <br> Test Year | $\mathbf{2 0 2 4}$ <br> MP <br> Regulated <br> Test Year | $\mathbf{2 0 2 4}$ <br> MN <br> Jurisdictional <br> Test Year |
| :--- | :---: | :---: | :---: | :---: |
| Service cost | $\$ 9.2$ | $\$ 6.5$ | $\$ 4.1$ | $\$ 3.7$ |
| Interest cost | 26.5 | 37.7 | 24.0 | 21.5 |
| Amortization of loss | 10.9 | 6.6 | 4.2 | 3.7 |
| Amortization of prior service cost | $(0.1)$ | $(0.1)$ | $(0.1)$ | $(0.1)$ |
| Expected return on plan assets | $(41.5)$ | $(43.3)$ | $(27.6)$ | $(24.6)$ |
| Pension Expense | $\mathbf{\$ 5 . 0}$ | $\$ \mathbf{7 . 4}$ | $\$ 4.6$ | $\$ 4.2$ |
| Pension Expense If No EROA | $\$ 46.5$ | $\$ 50.7$ | $\$ 32.2$ | $\$ 28.8$ |

Company's contribution) for any purpose other than funding pension benefits for employees.
Q. Please provide an example of how the EROA and the related investment earnings reduce pension expense.
A. The earnings on the investments, referred to as the Expected Return on Plan Assets (created by the EROA) significantly reduce ALLETE's pension expense. For example, Table 2 below shows the components used to calculate ALLETE's 2022 pension expense (the last full year with audited numbers). As Table 2 demonstrates, all the investment return or EROA reduces the 2022 pension expense by $\$ 41.5$ million, or approximately 89 percent, of the plan's expense. If there was no reduction for the Expected Return on Plan Assets, 2022 pension expense would have been $\$ 46.5$ million rather than $\$ 5.0$ million.

Table 2. Pension Expense Example (\$ in millions)
Q. Earlier you mentioned the EROA is multiplied by a five-year smoothed pension asset balance. Why does the Company take this step to determine pension expense?
A. Because the payment of a pension obligation is over a significant period of time, ASC 715-30 allows the use of certain smoothing techniques to "normalize" pension expense. The assumed EROA is then applied to the smoothed asset value to determine that component of the current year expense. ALLETE smooths asset gains and losses over five years-the maximum allowable under ASC 715. Using a five-year smoothed pension asset balance reduces the volatility, or normalizes the pension expense, so that customers do not see such wide ranges of pension expense from year to year as they otherwise would. This predictability is a benefit to customers.

## Q. Does ALLETE take other steps to reduce pension expense volatility?

A. Yes. For purposes of calculating pension expense, the Company utilizes all smoothing methods allowed under pension accounting rules (ASC 715-30). Under these methods:

- ALLETE uses a smoothed market-related value of assets in calculating expense. This is the smoothed pension asset balance mentioned immediately above. The market-related value of assets phases in investment gains or losses over a fiveyear period, which reduces volatility by using a more stable asset value to determine the Expected Return on Plan Assets component of expense. The market-related value of assets also reduces volatility in the amortization of gains and losses, described below, because recent investment gains and losses are excluded from the amortization calculation to the extent they are not included in the market-related value of assets;
- In accordance with ASC 715-30, ALLETE amortizes accumulated gains and losses, excluding gains and losses not yet phased into the market-related value of assets, in the pension expense.
- ALLETE uses a corridor to determine if gains and losses will be amortized in expense. The corridor is the greater of 10 percent of the plan's obligation or 10 percent of the plan's market-related value of assets. This is the maximum corridor allowed by ASC 715 and so provides the greatest possible reduction to volatility.
- If accumulated gains and losses are within the corridor, no gains and losses are amortized in expense.
- If accumulated gains and losses subject to amortization exceed the corridor, only the excess is amortized over the average future service of active participants or the average life expectancy of all plan participants if there are no active participants accruing benefits in the plan; and
- Increases or decreases in plan liabilities resulting from plan amendments are amortized over the average future service of the active participants affected by the plan amendment.


## Q. What are the effects of the smoothing?

A. Appropriate smoothing has the benefit of reducing volatility and increasing predictability of the pension expense. The actual benefits of smoothing on ALLETE's pension expense over the last 12 years are shown vividly in Figure 2 below, where the actual expense (smoothed)-or blue dashed line-is relatively flat compared to the pension expense without smoothing (the orange solid line). This comparison demonstrates that over the last 14 years, ALLETE's actual pension expense (smoothed) range was less than $\$ 20$ million ( $\$ 0.8$ million to $\$ 20.7$ million); however, the range of pension expense without smoothing was almost seven times greater, with an approximate range of $\$ 136$ million (negative $\$ 69.9$ million to $\$ 66.0$ million).

Figure 2. Historic Pension Expense - With and Without Smoothing


## Q. Does Minnesota Power support using the actuarially determined pension expense

 for ratemaking purposes in this case?A. Yes. As in past cases, Minnesota Power has consistently recommended using actuarially determined pension expense to set rates because it is consistent, measurably accurate, and represents a specific test year cost of providing utility service. Conversely, if pension expenses are not determined consistently, "cherry picking" of other methodologies could occur-which could artificially increase or reduce the Company's pension expense recovery and would not reflect the Company's actual cost of providing service to its customers. In fact, as reflected in Table 3 below, the Commission approved three different methods in the Company's last three completed rate cases.

Table 3. Reconciliation of ALLETE's plan balance to ALLETE's Form 10-K for the year ended 2022

| Rate Case Year | Company Proposed Method | Approved Method | Rate Case Docket | Comment |
| :---: | :---: | :---: | :---: | :---: |
| 2009 | Budget Test year $\left(\right.$ Direct) ${ }^{7}$ <br> January Actual (Rebuttal) $^{8}$ | 5-year average <br> $(2006-2010)^{9}$ | E015/GR-09-1151 | DOC Recommended 5-year average. |
| 2016 | Budget Test year (Direct) ${ }^{10}$ <br> January Actual (Rebuttal) ${ }^{11}$ | January Actual ${ }^{12}$ | E015/GR-16-664 | DOC agreed with the Company and recommended the updated actual pension amount. |
| 2021 | Budget Test year ${ }^{13}$ | Budget Test year ${ }^{14,15}$ | E015/GR-21-335 | Budget test year was recommended by DOC because it was "very close to a 4year average" of pension expense. |

3

# Q. Why do you believe using the actuarially determined estimated pension expense is 

 the most accurate?A. The actuarially determined method, which reflects the requirements within GAAP, is the most accurate as it relies on third-party specific rules, methodologies, and expertise in this area and incorporates all of the most recent known and relevant information.

[^5]Q. Is there evidence that the actuarially determined pension expense is also the most accurate measure of actual Company expense?
A. Yes. We have statistically measured the actuarially determined pension expense estimate's correlation, or r-squared, to the next year's actual pension expense. The correlation is very high at 0.983 - close to being statistically perfectly correlated. An rsquared value is a statistical measurement that measures how the proportion of the variance of one number is attributable to another number. An r-squared value of 1 is perfectly correlated (or explains all of the variability), 0 is uncorrelated, and -1 is perfectly negatively correlated. The high correlation we measured is illustrated in Figure 3 below, where the two lines (yellow solid line being the estimated pension expense and blue dashed being the actual pension expense) are essentially on top of each other-indicating the actuarial estimate is an excellent predictor of actual expense over the last decade.

Figure 3. Minnesota Power Estimated vs. Actual Pension Expense

Q. Is there an alternative way to recover pension expense that is more accurate?
A. Yes. An alternative approach could be to use updated actuals as of the December 31, 2023 measurement date, which will be available in late January or early

February 2024. This was the approved method of determining pension expense in Minnesota Power's 2016 Rate Case, Docket No. E015/GR-16-664 ("2016 Rate Case"); however, the budget test year amount was the approved expense in the 2021 Rate Case.
Q. What do you conclude regarding the Company's pension expense included in Minnesota Power's 2024 test year?
A. Minnesota Power supports recovery of the Company's budgeted 2024 test year pension expense. However, the Company would also accept the use of the January 2024 actual expense determined by our actuaries. Over the years, the Company has consistently recommended and supported the determination of pension expense based on the Company's GAAP pension expense as determined by our actuary, including the current year's assumptions, which are presented herein. Also, as noted in Figure 3 above, actuarial estimates have been extremely close to actuals in past years; therefore, following the Department's recommendations from the 2021 Rate Case to use test year pension expense would be reasonable. Using another method to calculate pension expense, or switching methods from rate case to rate case, has the strong potential to distort the forecasting methodology mandated by the SEC and GAAP to measure the cost of the plan, thereby precluding the Company from recovering its costs of providing retirement benefits to Company employees.

## C. Pension - Accumulated Contributions in Excess of Net Periodic Benefit Cost

1. Overview of Accumulated Contributions in Excess of Net Periodic Benefit Cost

## Q. What is the Company requesting with regard to its accumulated contributions in excess of net periodic benefit cost?

A. The Company requests that the thirteen-month average of its 2024 test year pension plan accumulated contributions in excess of net periodic benefit cost of $\$ 86,688,516 \mathrm{MN}$ Jurisdictional (see MP Exhibit ___ (Cutshall), Direct Schedule 5) be included in rate base. This would result in a net increase to rate base of $\$ 56,944,267 \mathrm{MN}$ Jurisdictional for accumulated excess contributions, net of ADIT. The ADIT applied to the
accumulated contributions in excess of net period benefit cost equals $\$ 29,744,250^{16} \mathrm{MN}$ Jurisdictional and consists of $\$ 24,916,013$ computed at the statutory tax rate of 28.742 percent plus excess deferred tax of $\$ 4,828,236$. The excess deferred tax is a result of the corporate income tax rate change in the Tax Cuts and Jobs Act of 2017. The net increase, or $\$ 56,944,267 \mathrm{MN}$ Jurisdictional, is the amount on which the Company seeks to earn a return. In other words, Minnesota Power asks to treat these accumulated contributions in the same manner as any other asset in rate base-all of which similarly fluctuate.
Q. Have Minnesota Power and other companies used other naming conventions for accumulated contributions in excess of net periodic benefit cost?
A. Yes. SFAS 87 used the term "prepaid pension cost." Historically, other terms such as "prepaid pension expense" and "prepaid pension asset" have been used to signify cumulative contributions to a pension plan in excess of its cumulative expense. These terms mean the same thing. Likewise, the Company would note that prior Commission orders used the term "prepaid pension," and many surveys, articles, companies, and audited GAAP financial statements reviewed by the SEC still use that term.

## Q. Has the Company requested recovery of a return on these prepaid contributions to the pension fund before this case?

A. Yes. Minnesota Power recognizes that the Commission has concluded in the Company's prior rate cases that the Company did not receive rate-base treatment of prepaid pension funds. The Commission directed the Company to remove the prepaid pension asset, along with the associated tax savings, from the test year rate base. ${ }^{17}$

[^6]
## Q. Why is Minnesota Power seeking to include this asset in rate base and earn a return on it in this proceeding?

A. The investment of this significant amount of capital on behalf of the Company's workers, and to the benefits of its customers, has negative financial impacts on the Company if it is not recognized. These factors compel the Company to continue its request for authorization to include this important utility investment in rate base.

Further, the Company concludes that excluding the asset from rate base does not provide a return on a reasonable investment that exists to compensate employees and serve customers, and that Minnesota Power is justified on the merits and the reasonableness of including the prepaid pension asset in rate base. In this testimony, the Company addresses the concerns expressed by the Commission and parties in past rate cases, provides additional information, and explains and bolsters the justifications supporting recovery in this proceeding.

Additionally, the issue of the Company's right to earn a return on cumulative Company contributions to the prepaid pension asset in excess of cumulative expense is currently pending before the Minnesota Court of Appeals. It is too soon to know the impact of that appeal on the issue for this rate case; therefore, the Company will make a record of what it believes to be the appropriate outcome given the nature of the asset and the impact of Company contributions to the prepaid pension asset on the overall financial health of the Company.

## Q. How is your discussion of this issue organized in your Direct Testimony?

A. First, I explain what the accumulated contributions in excess of net periodic benefit cost are and how they benefit Minnesota Power employees while also directly reducing customer rates. I also provide a specific, simplified example of how this worksshareholder contributions to the pension fund in excess of expense earn market returns, which directly reduces the annual expense included in customer rates, and, under the current non-recovery of its capital costs, reduces the Company's earnings. Next, I explain how the Company's accumulated contributions in excess of net periodic benefit
cost appear on the ALLETE financial statements and are stated in accordance with GAAP. Finally, I walk through the Commission's reasons for denying a return on this asset in the prior rate cases and identify how the Company has rectified any concerns the Commission had.
Q. Can you describe in more detail what Minnesota Power's pension accumulated contributions in excess of net periodic benefit cost are?
A. Yes. The pension's accumulated contributions in excess of net periodic benefit cost consists of cumulative contributions the Company has made to a pension fund less cumulative expense. Minnesota Power's accumulated contributions in excess of net periodic benefit cost arose from the fact the Company has contributed more to its employee pension plan (cumulatively) than it has expensed since 1952, the inception year of the plan. The Company has been required to obtain equity and debt financing in order to make those contributions.
Q. What is the current balance of the plan's accumulated contributions in excess of net periodic benefit cost?
A. As of December 31, 2022, the ALLETE plan's accumulated contributions in excess of net periodic benefit cost balance was an asset balance of $\$ 103,911,857$, and the Company estimates the ALLETE plan's December 31, 2023 and 2024 balances to be $\$ 112,401,822$ and $\$ 129,618,749$, respectively. Additional historical information is included in MP Exhibit ___ (Cutshall), Direct Schedule 1.
Q. Is there a tax benefit for making contributions to the pension plan?
A. Yes. The Company's contribution to the pension plan is tax-deductible up to the limit set by the Internal Revenue Service ("IRS"). This tax deduction is a cash benefit to the Company in the year that the contribution is made. When pension contributions exceed the expense in any given year, this cash benefit creates a corresponding deferred income tax liability. Since the pension plan's inception, the accumulation of these annual deferred tax liabilities has created a related ADIT balance. If the Minnesotajurisdictional portion of the accumulated contributions in excess of net periodic benefit
cost is included in rate base, then the resulting ADIT will also be included and reduce rate base. In other words, customers would receive the full economic benefit of the excess tax deductions over the Company's GAAP-determined pension expense.

## Q. Are there other current components in rate base that are treated the same way as pension contributions for tax purposes?

A. Yes. When Minnesota Power makes a contribution to the pension plan, that contribution is tax deductible when paid. Therefore, the payment is treated exactly the same as prepaid insurance, another item that is included in rate base. In contrast, other components in rate base, such as fixed assets, are depreciated for GAAP accounting and IRS purposes.
Q. Can you calculate the ADIT related to the pension's accumulated contributions in excess of net periodic benefit costs?
A. Yes. The calculation for the tax treatment of the pension contributions that created the accumulated contributions in excess of net periodic benefit cost is as follows: multiply the accumulated contributions in excess of net periodic benefit cost by ALLETE's combined federal and state tax rate of 28.742 percent, which equals the ADIT, then add back the excess deferred tax (as described previously). The total impact to the full MN Jurisdictional amount in rate base will be reduced by the corresponding ADIT.
Q. What, then, is the total amount the Company is proposing to include in rate base?
A. The Company requests that the 13-month average of its 2024 test pension plan accumulated contributions in excess of net periodic benefit cost of $\$ 86,688,516 \mathrm{MN}$ Jurisdictional, less the related ADIT of $\$ 29,744,250$ MN Jurisdictional, for a net amount of $\$ 56,944,267 \mathrm{MN}$ Jurisdictional be included in rate base and allowed to earn a WACC return. In short, the Company is requesting to earn a return on-not a return of-these cumulative contributions in excess of cumulative expense.
2. Ratemaking Support for Asset

## Q. Please summarize why Minnesota Power's accumulated contributions in excess of net periodic benefit costs should be included in rate base and earn a return like other instances where the Company incurs a cost in advance of when that cost is recovered from customers.

A. Over the life of the plan, the ultimate cost of any pension plan to the Company are the cash contributions that must be made to the plan in order to fund participant benefits. From a ratemaking perspective, the annual recovery of pension expense provides a consistent and predictable rules-based method for the recovery of a portion of those contributions. However, there is (and has been for decades) a difference between the cumulative contributions that remain in the pension trust to serve customers, and the cumulative expense included in rates based on any given test year values. It is ultimately the Company's goal to recover the cash costs of its plan-no more and no less. In order to ensure that neither the Company nor customers are harmed during periods when the Company has invested more in the pension plan than it is recovering through expenseand therefore losing the time value of money during those periods-the fairest method of recovering the cash costs of our plans is to recover our annual expense each year with a carrying charge for the difference between the cash that we fund and the amount recovered from customers through expense.

In the absence of rate base treatment for the excess contributions, the Company is forced to obtain financing for these contributions with no corresponding recovery from customers. This will continue to prevent the Company from having a reasonable opportunity to earn its return on equity authorized by the Commission.

As discussed in detail below, recognition of Minnesota Power's funding of the accumulated contributions in excess of net periodic benefit costs should be included in rate base for several reasons: 1) these costs are a necessary cost of providing safe and reliable electric service; 2) a certain level of pension contribution is required by law to fund pension plans, and thus these costs are not discretionary; 3 ) contributions in excess of pension expense to the pension plan are financed by the Company and benefit
customers by lowering expenses (as demonstrated previously in Table 2) and lowering liabilities; 4) there is precedent in in other jurisdictions for including accumulated contributions in excess of net periodic benefit costs in rate base, and many other states have also recognized that this is necessary to compensate shareholders for pension funds contributed in excess of amounts included in rates; and 5) it is consistent with standard ratemaking treatment when contributions and expenses differ significantly for any cost of providing utility service. Given that a regulated utility is entitled to a fair return on costs it incurs as necessary to provide safe and reliable utility service, these costs should be included in rate base.

## Q. Is including accumulated contributions in excess of net periodic benefit cost in rate base consistent with standard ratemaking treatment?

A. Yes. Including the accumulated contributions in excess of net periodic benefit cost in rate base is consistent with standard ratemaking treatment. In fact, it is fundamental to ratemaking that when expense deviates from cash payments, an asset or liability for the differences is included in rate base. Examples include deferred tax assets, deferred tax liabilities, and items such as accounts receivable, accounts payable, inventory, and prepaid expenses.

As another example, customers receive the financing benefit of contributions in aid of construction through its reduction of rate base. All of these items involve a timing difference between the receipt of cash and the recognition of expense, which necessitates the Company to obtain additional financing. It should be no different for the timing difference between contributions and expenses for a pension plan. If it is not, one party benefits from the time value of money at the other party's expense. Simply stated, the contributions in excess of net periodic benefit cost asset, as it is handled today, gives the customer an interest free loan by which all of the earnings of within the pension trust fund directly reduce the expense that the customer needs to pay, while the Company finances a portion of its contributions without giving any compensation to the Company for the cost it incurs. In essence, this is "lending" earnings to the customer. Put differently, as discussed further in my testimony and shown in Figure 4, the actual
funding of the prepaid pension asset earns a return that is directly utilized-and can only be solely utilized-to reduce annual pension expense for the benefit of customers. Compounded earnings on these contributions go even further to reduce pension expense. And given the longstanding nature of pension obligations, as well as the ongoing existence of the prepaid pension asset over many years, this interest free loan is likely to last decades.
Q. Is there precedent for including accumulated contributions in excess of net periodic benefit cost in rate base?
A. Yes. Multiple other state commissions have also specifically found that it is important to the regulatory compact to allow a utility making cumulative contributions to its pension fund in excess of cumulative expense to earn a return on those assets; otherwise, the utility's additional contributions are being used to reduce customer expense without any compensation to the shareholders who made the contribution. I discuss other states' analysis and conclusions later in my testimony.

## a. Legal Requirements for Contributions

Q. Why doesn't the Company just make contributions to the plan equal to its pension expense, so that it would not have accumulated contributions in excess of net periodic benefit cost asset balance?
A. By law, a company cannot simply make contributions to the plan equal to its pension expense. As I discussed earlier, the pension expense and contributions represent different aspects of the pension plan and are governed by two different authorities. The pension expense represents the Company's annual pension plan costs on the income statement, which is determined by GAAP as set forth by the FASB and accepted by the SEC and is the approach/item used to recover from Minnesota Power customers. Contributions to the pension plan, on the other hand, are made by the Company (via its shareholders) to satisfy the funding requirements of ERISA, the IRC, and the provisions of the PPA. The PPA established certain minimum funding requirements for plan years beginning in 2008 and continuing through the present. Prior to enactment of the PPA, pension contributions and pension expense were either largely equal or in balance. The
funding rules have been promulgated by Congress to ensure that companies adequately fund their plans over time. Those rules are based on different discount rates and amortization periods from the accounting standards. In addition, pension funding rules reflect the inherent political nature of the federal rulemaking processes.

## Q. How do these requirements result in an asset or liability?

A. These requirements result in an asset or liability because of different calculation and timing requirements. When an employer finances the contribution of more cash to the pension plan (per ERISA, the IRC, and the PPA) than it has recorded in expense over the same period (per GAAP), the result is the recognition of accumulated contributions in excess of net periodic benefit cost or-using earlier terminology-a "prepaid pension asset." Conversely, utilizing customer funds to contribute less than the expense recognized would result in additional liability or a "prepaid pension liability." And customers should receive the economic benefit of that liability in such case.
Q. How did the enactment of the PPA prompt the Company to request to include the regulatory asset in rate base in the 2016 Rate Case as well as future rate cases?
A. There are several reasons the Company did not request prepaid pension assets liabilities to be included in rate base prior to the enactment of the PPA, including:

- Contributions and expenses were largely equal, as illustrated in MP Exhibit $\qquad$ (Cutshall), Direct Schedule 1 and-as a result-this issue did not have a material impact on either customers or the Company;
- The prepaid pension balance was both an asset and liability at times over the prior years, and neither favored customers nor the Company over long periods of time; and
- Prior to enactment of the PPA, the Company had more flexibility in determining the timing and amount of contributions.

The enactment of the PPA resulted in significant increases in contributions in 2008 and projected future years. This had noticeable detrimental impacts on the then-current and future cash financial ratios. In fact, these projected contributions had such a large impact
on any company offering pension plans that the U.S. Congress subsequently enacted laws multiple times reducing some of the PPA-required contributions. The latest example of this is the American Rescue Plan Act of 2021, enacted in March 2021. Upon understanding these historical impacts, the Company requested deferred accounting and the recognition of the prepaid asset in its Petition for Approval of Deferred Accounting Related to Pension Plan (Docket No. E015/M-11-1264), filed on December 22, 2011. The Company's request was denied in part because the cost was not considered "unusual, unforeseeable, and large enough to have a significant impact on the utility's financial condition," which are the traditional Commission criteria for deferred accounting. ${ }^{18}$ The Company was directed to take up the issue in a future rate case if the Company so chose.

## Q. Is the Company only seeking to include the accumulated contributions in excess of net periodic benefit cost in rate base if it is an asset?

A. No. The Company believes it is appropriate to include accumulated contributions in excess of net periodic benefit cost in rate base, whether it is an asset or a liability, for the duration of the plan.
b. Harm of Excluding Asset from Rate Base
Q. Does not allowing accumulated contributions in excess of net periodic benefit cost in rate base have financial and credit implications?
A. Yes, in at least three ways: 1) by denying shareholders the time value of their money contributed to the pension fund in excess of recovered expense (in essence, the cost to finance those contributions); 2) by not allowing the Company to earn a fair return on all assets invested; and 3) by reducing the Company's cash flows such that its credit metrics and resulting credit ratings are impacted.

[^7]Q. Please explain how excluding the accumulated contributions in excess of net periodic benefit cost from rate base denies shareholders the time value of their money.
A. The PPA required substantial increases in contributions to the Company's pension fund beginning in 2008 and going forward. In many of the years since 2008, annual contributions have been significantly greater than the pension expense (shown in MP Exhibit___ (Cutshall), Direct Schedule 1 and in Figure 4 later in my testimony). These increased contributions also have reduced, and will continue to reduce, pension expense more than would have been expected pre-PPA since ASC 715-30-35 ${ }^{19}$ requires all earnings on pension fund investments be used to reduce pension expense. Because the Company's cash contributions since 2008 have been significantly higher than the pension expense funded by customers, creating the accumulated contributions in excess of net periodic benefit cost asset (from $\$ 40$ million in 2008 to over $\$ 100$ million currently), the Company has been required to finance those contributions and should be compensated for the use of funds above what has been reimbursed in the form of pension expense included in rates. If the Company is not compensated for the use of its money, customers receive benefits (in the form of reductions to pension expense) without compensating shareholders for the financing cost of utilizing their dollars. Meanwhile, shareholders receive no return for contributions while they are tied up in the pension funds. Customers thus receive the benefit of the return on the shareholder investments until such time there is no longer any accumulated contributions in excess of net periodic benefit cost.
Q. Please explain how excluding the accumulated contributions in excess of net periodic benefit cost from rate base harms the Company by not being able to earn a fair return on all of its investments.
A. Under standard ratemaking, regulated utilities are entitled to a fair return on costs incurred necessary to provide utility service. By not being allowed to earn a fair return on all of the Company's assets-and in particular, being denied to earn a return on the

[^8]pension accumulated contributions in excess of net periodic benefit cost precludes the Company from a reasonable opportunity to recover its cost of service and earn its authorized rate of return. It is not sustainable for the Company to continue to fund these plans at the investors' expense for the customers' financial benefit, and this has, and will continue to, result in negative credit impacts and send the wrong message to utilities about the need to support these important employee benefits.

## Q. Please explain how excluding the accumulated contributions in excess of net periodic benefit cost from rate base could harm the Company's cash flows and credit metrics?

A. Denying Minnesota Power the ability to recover the financing cost of the accumulated contributions in excess of net periodic benefit cost decreases Minnesota Power's cash flow. Decreased cash flow negatively impacts the Company's credit metrics (because many credit rating agency metrics are based on cash flow) which only serves to further increase costs to customers. Moreover, such exclusion raises fairness concerns and would call into question whether a utility has the needed credit support from its regulators. In fact, the Company's credit rating agencies have identified the Commission's decision not to include Minnesota Power's pension prepayments in rate base as contributing to their concern about the regulatory framework and about the Company's financial position. When Moody's Investors Service downgraded ALLETE from an A3 to Baa1 in its April 3, 2019 report, it cited a "negative general rate case outcome" as well as "various expense disallowances including a decision to disallow the recovery of about $\$ 3$ million of prepaid pension expenses. ${ }^{20}$ Therefore, the Company's credit rating decisions make it particularly important to recover its significant costs of service.

[^9]
## c. Benefit of Accumulated Contributions in Excess of Net Periodic Benefit Cost to Customers

Q. Earlier you referenced that accumulated contributions in excess of net periodic benefit cost provide a direct benefit to customers in addition to simply funding the provision of utility service. Please explain how that works.
A. Since the recovery of pension costs is currently based on the amount of pension expense recognized for accounting purposes, pension contributions in excess of expense must be made from Company-financed funds, rather than from funds received through rates from customers. However, all of the investment earnings resulting from these contributions have benefited customers by significantly reducing the Company's annual pension expense under ASC 715-30. Yet the Company has incurred 100 percent of the cost to finance these funds (net of the income tax benefit). Customers benefit as a result of lower pension expense being included in base electric rates. More specifically, accumulated contributions in excess of net periodic benefit costs can provide benefits to the customer in at least three ways:

1. Customers benefit from prepaid pension because ALLETE's credit rating agencies model the reduced future fundings, thus reducing the cost of capital customers pay;
2. All investment earnings from the increase in pension plan assets reduce pension expense. The Company is able to recognize higher earnings because the EROA is applied to the prepaid balance, which directly reduces costs to customers (how EROA earnings reduce pension expense is demonstrated in Table 2 above); and
3. Customers benefit from applying the EROA to the accumulated earnings on the prepaid pension asset (the compounding of earnings).

It is a long-standing ratemaking principle that utilities are entitled to an opportunity to earn a reasonable return on investments made to provide safe and reliable service for the benefit of customers. ${ }^{21}$ Without including the Company's pension contributions (the

[^10]accumulated contributions in excess of net periodic benefit cost) in rate base, the Company is not being compensated for the financing cost it incurs, even though customers are earning a return on these assets through the resulting pension expense reduction. Here, customers benefit from the federally-mandated Company-financed contributions made to fund pension benefits available to utility employees.

## Q. Are there any other reasons it is appropriate to include accumulated contributions in excess of net periodic benefit cost in rates?

A. Yes. As the pension plans become more fully funded, it is expected that contributions will decline to the point where they are less than the expense, reducing the accumulated contributions in excess of net periodic benefit cost asset. (This declining asset balance is no different than depreciation on a physical asset.) Eventually, when the plan is terminated, the accumulated contributions in excess of net periodic benefit cost asset will turn into an expense paid for by customers. Absent inclusion in rates so the utility may earn a return on the asset (because the Company is only seeking a return on the asset and not recovery of the asset), the current situation has created a mismatch between standard ratemaking treatment where a regulated utility is entitled to a fair return on costs it incurs as necessary to provide utility service and when the costs are paid for by the customers.

## Q. What is the level of Minnesota Power's pension contributions, expense, and recovery since the $P P A$ took effect?

A. As illustrated in MP Exhibit ___ (Cutshall), Direct Schedule 1 and in Figure 4 below, ALLETE's pension contributions from 2008 through 2023 have totaled $\$ 214.9$ million ALLETE ( $\$ 165.0$ million MP regulated; $\$ 143.7$ million MN Jurisdictional). In addition, ALLETE has incurred pension expense totaling $\$ 131.0$ million ( $\$ 96.7$ million MP regulated; $\$ 83.9$ million MN Jurisdictional)—of which it has collected only \$41.5 million MN Jurisdictional through rates since 2008.

Figure 4. MN Jurisdictional Historical Pension Contributions, Expense, and Recovery

Q. Why doesn't recovery of pension expense adequately compensate the Company for its pension investments?
A. As illustrated in the actual recovery amounts identified in Figure 4 by recovering the pension expense, the Company is not recovering its actual costs incurred to finance its obligatory pension contributions made in excess of the recovered pension expense. If the prepaid asset and the related deferred income tax liability were included in rate base, the cost of capital to finance the asset would be easily calculated by multiplying the WACC by the Company's accumulated contributions in excess of net periodic benefit cost. The WACC is the true cost to investors, who must fund the pension plan in excess of what the Company recovers from customers.
Q. Can you identify the specific amount by which Minnesota Power's accumulated contributions in excess of net periodic benefit cost are reducing customer rates in the 2024 test year?
A. Yes. As shown in MP Exhibit ___ (Cutshall), Direct Schedule 6, the 2024 accumulated contributions in excess of net periodic benefit cost will reduce the 2024 test year pension expense by $\$ 8,022,982$ ALLETE (\$6,000,640 MP regulated; \$5,339,729 MN Jurisdictional). Note this calculation does not reflect the savings that would have been
generated in prior years if the EROA percentage had been applied to the accumulated earnings on the accumulated contributions in excess of net periodic benefit cost in those years.
Q. How does the calculation of the prepaid pension asset account for the fact that the amount of pension expense included in a test year may differ somewhat from the actual pension expense incurred in a test year or between rate cases?
A. It does so in multiple ways. First, it is no different than any other test year cost, where the amount included in rates is based on the best information available at the time and representative. An example is how actual depreciation expense in a test year or between rate cases may differ somewhat from amounts included in a representative test year. Such differences are fundamental to ratemaking. Second, because the prepaid pension asset in any given year is calculated based on cumulative contributions versus cumulative pension expense for the period in question, it always reflects the total current asset (or liability) balance regardless of any differences from prior test years. With this in mind, the data in each test year is updated to provide the most currently available actual data since the last rate case, and a current forecast for any future period. Again, this is no different than how any balance sheet or rate base item is calculated including the related expenses.

## 3. Financial and Audit Support for Asset

Q. Is the accumulated contributions in excess of net periodic benefit cost asset balance reported in your GAAP financial statements?
A. Yes. This balance, which is a net debit balance (asset), is included in ALLETE's audited GAAP financial statements. The balance is reported in ALLETE's most recent Form 10K, in Note 12—PENSION AND OTHER POSTRETIREMENT BENEFIT PLANS (page 112 of the 2022 Form 10-K; included in Volume 3, Direct Schedule F-1, Other Supplemental Information). An excerpt of this portion of the footnote is shown in Figure 5 below.

Figure 5. ALLETE 10-K Pension and Postretirement Benefit Plans Footnote

Reconciliation of Net Pension Amounts Recognized in Consolidated Balance Sheet

| As of December $\mathbf{3 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 1}$ |
| :--- | ---: | ---: |
| Millions |  |  |
| Net Loss | $\$(260.2)$ | $\$(260.2)$ |
| Prior Service Credit | 0.1 | 1.0 |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost (Prepaid Pension Asset) | 89.0 | 93.2 |
| Total Net Pension Amounts Recognized in Consolidated Balance Sheet | $\$(171.1)$ | $\$(166.0)$ |

Q. Can you reconcile what is reported in ALLETE's 2022 Form 10-K Note 12 for accumulated contributions in excess of net periodic benefit cost asset balance with the ALLETE plan's balance?
A. Yes. The footnote in the 2022 Form 10-K also includes other plans. To reconcile ALLETE's reported Form 10-K balance, two other benefit plans-Supplemental Executive Retirement Plan ("SERP") and Executive Investment Plan ("EIP")—must be included with ALLETE's pension plan's accumulated contributions in excess of net periodic benefit cost debit or asset balance. Table 4 below illustrates the reconciliation.

Table 4. Reconciliation of ALLETE's plan balance to ALLETE's Form 10-K for the year ended 2022

| ALLETE prepaid asset balance | $\$ 103,911,857$ |
| :--- | :---: |
| SERP and EIP liability balances | $(\$ 14,955,642)$ |
| Form $\mathbf{1 0}$-K reported balance | $\mathbf{\$ 8 8 , 9 5 6 , 2 1 5}$ |

Q. Following GAAP, does ALLETE have a net asset or liability balance when reporting its balance?
A. It has an asset balance. Table 5 below illustrates how the plan balance is recorded in the Company's financial records.

Table 5. Plan Balance as Recorded in Company Financial Records (\$ in millions)

| FERC <br> Account <br> Number | Name | Type | 2024 MP <br> Balance <br> Test Year | 2024 <br> MP <br> Regulated <br> Test Year | 2024 MN <br> Juris. <br> Balance <br> Test Year |
| :---: | :---: | :---: | ---: | :---: | :---: |
| $18230-6015$ | Pension | Asset | $\$ 212.8$ | $\$ 166.6$ | $\$ 148.2$ |
| $22830-2009 \&$ <br> $22830-2011$ | Pension Plan B\&C | Liability | $(127.3)$ | $(99.7)$ | $(88.7)$ |
| $21900-0003$ | AOCI Pension |  | 37.5 | 29.4 | 26.1 |
| Total Plan Balance |  |  |  |  |  |

Q. How does this $\$ 85.7$ million total correspond to the amount the Company is requesting to include in rates?
A. The 2024 expected ending asset balance for Minnesota Power of $\$ 122.9$ million ( $\$ 96.3$ million MP regulated; $\$ 85.7$ million MN Jurisdictional)—as reflected in Table 5 above-corresponds to the amount of Minnesota Power's estimated 2024 test year 13month average, which is $\$ 124.5$ million ( $\$ 97.4$ million MP regulated; $\$ 86.7$ million MN Jurisdictional) as reflected in MP Exhibit ___ (Cutshall), Direct Schedule 5.
Q. Does Minnesota Power follow GAAP in all regards to its accounting and financial statements?
A. Yes, of course. ALLETE (doing business as Minnesota Power) is a publicly traded entity that is required to have an annual audit of its consolidated financial statements. In addition, the Company is required to file audited financial statements prepared in accordance with the Uniform System of Accounts on Form 1 with FERC each year. As part of this annual audit, ALLETE's independent registered public accounting firm, PwC, opines that ALLETE's consolidated financial statements, which are supported by the books and records that also form the basis for this general rate case, are presented fairly-in all material respects-and are "in conformity with accounting principles generally accepted in the United States of America." ${ }^{22}$ This opinion would not be

[^11]possible if Minnesota Power did not follow GAAP with respect to a net asset as significant as its accumulated contributions in excess of net periodic benefit cost. In addition, other governmental authorities also review ALLETE's audited financial statements; for example, the SEC reviews ALLETE's Form 10-K every three years and has had no comments on the Company's accounting for its benefit plans, including its presentation of the cumulative contributions in excess of cumulative expense (the prepaid pension asset).

## 4. Past Decisions on Prepaid Pension Assets in Rates

a. Prior Minnesota Commission Decisions

## Q. What is the purpose of this section of your testimony?

A. In this section of my testimony, I address the Commission's past decisions that the Company did not meet its burden to justify including the prepaid pension asset in rate base.

## Q. What has been the rationale for the Commission's decision in to exclude the "prepaid pension" asset from rate base?

A. In its decision in the Company's 2021 Rate Case, the Commission held that Minnesota Power "failed to satisfy its burden to show that the prepaid pension asset is entirely funded by shareholders and not partially by market returns." ${ }^{23}$ In making this statement, the Commission concurred with the Department that "it would be impractical, if not impossible, to equitably separate the prepaid amount attributable solely to Minnesota Power's contributions from that attributable to ratepayer contributions and market returns." ${ }^{24}$ The Commission also stated that "the balances in the prepaid pension asset are temporary, and fundamentally different from typical rate-base assets on which the Company earns a return on investment. ${ }^{" 25}$ Finally, the Commission expressed concern that the status of the prepaid pension asset is misleading in that it does not represent the funded status of the pension plan. I will address each of these conclusions in turn.

[^12]i. Entirely Funded by Shareholders, Not Market Returns or
Ratepayer Contributions
Q. Is there clear, mathematical proof that the pension's accumulated contributions in excess of net periodic benefit cost asset is funded entirely by shareholders?
A. Yes, as discussed earlier in my testimony, pension contributions and expense are governed by two different authorities (ERISA/IRC/PPA and FASB, respectively), each determined on an annual basis. Pension contributions are funded with Company cash (and occasionally Company stock) in order to maintain the plan's funded status, while pension expense is a non-cash accrued expense calculated by Minnesota Power's actuary, WTW, in accordance with GAAP. Pension contributions are direct reductions to cash flow while pension expense collected from customers results in operating cash flow. As shown in Figure 4 and included in MP Exhibit $\qquad$ (Cutshall), Direct Schedule 1, over the years, pension contributions have far exceeded the amount of pension expense recorded by the Company and recovered by customers.

## Q. Ultimately, is it difficult to determine whether customers or investors made the contributions to the prepaid pension asset?

A. No. The Company makes contributions to the pension trust-they occur by no other means. Regarding recovery, historically, the amount that the Company has been able to recover from customers has been pension expense. This is even true when pension expense has been negative, meaning the customer would be reimbursed (paid) through rates. ${ }^{26}$ It is also fundamental to ratemaking that when expense deviates from cash payments, an asset or liability for the differences is included in rate base. If it were not, one party would benefit from the time value of money at the other party's expense, as previously discussed.

[^13]
## Q. Can the Company prove that the market returns on Company contributions to the

 prepaid pension asset are not returns provided to shareholders as compensation for their investment, but rather are applied to reduce expense?A. Yes. First, although the pension plan assets indeed earn a return in the form of investment returns, as I discussed earlier, those investment returns are-by law-used solely to pay retiree benefits and reduce the amount of pension expense recoverable from customers. In other words, the benefit of those investment (market/EROA) returns remain internal to the pension fund itself. Importantly, since those returns result from contributions to a qualified pension plan, they can never be used to compensate shareholders for the federally-mandated contributions they've made into the pension plan. Rather, as I demonstrated earlier in my testimony, the market returns solely go to reducing the cost of providing services to customers.

The Company only recovers or, said another way, the customer only pays, the pension expense as was shown previously. Accounting for pension expense under GAAP (ACS 715) requires reducing the actuarially calculated pension expense by the return on plan assets. In respect to cash payments-all of the contributions and benefit payments are made to/from the pension trust, and the corresponding assets and income generated from these assets are retained by the pension trust. This is shown clearly in MP Exhibit ___ (Cutshall), Direct Schedule 7, in the actuarial statements where on page 2, "Changes in Disclosed Plan Obligations and Assets," section B, "Change in Plan Assets," there is no line item nor cash payment to the Company but there is a line item for Employer contributions. This clearly shows that there is no payment to the Company. Therefore, the customer receives all the benefit of the income generated by the assets in the pension.

This was also demonstrated previously in Table 2 above, where all of the Expected Return on Plan Assets reduced pension expense by approximately 89 percent in 2022. This pension expense, which is net of all expected return on plan assets or net of future expected earnings on plan assets, then is recorded in FERC general ledger account 92608.

Further evidence that shareholders do not earn a return on their contributions is shown in the Company's latest actuarial statements ${ }^{27}$ as well as in the example in Table $6^{28}$ below that illustrates how excess investment returns and increased contributions affect pension expense. Compared to Scenario 1, Scenario 2 portrays how an additional $\$ 5$ million in asset returns decreases the amortization of loss component as well as how, because of extra earnings, the asset base-from which the expected return on assets component of expense is calculated-increases, resulting in a reduction of $\$ 147,500$ in pension expense. Compared to Scenario 1, Scenario 3 displays how an additional $\$ 10$ million of contributions made to the pension plan increases the expected return on assets component, thus reducing total pension expense by $\$ 675,000$. As you can see, shareholders do not benefit in any way from investment returns on the pension plan assets, but rather it is the customers that benefit.

Table 6. Impact to Pension Expense as a Result of Excess Returns or Contributions

| Pension Expense Example |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | Excess <br> Returns | Increased <br> Contributions |  |  |
| $(\$$ thousands) | Scenario <br> $\# 1$ | Scenario <br> $\# 2$ | Scenario <br> $\# 3$ | $\# 1$ vs. \#2 | $\# 1$ vs. \#3 |
| Service Cost | $\$ 9,570.0$ | $\$ 9,570.0$ | $\$ 9,570.0$ | - | - |
| Interest Cost | $8,180.0$ | $8,180.0$ | $8,180.0$ | - | - |
| Expected Return on Assets | $(9,390.0)$ | $(9,457.5)$ | $(10,065.0)$ | $\$(67.5)$ | $\$(675.0)$ |
| Amortization of Prior <br> Service Cost | - | - | - | - | - |
| Amortization of (Gain)/Loss | $4,720.0$ | $4,640.0$ | $4,720.0$ | $(80.0)$ | - |
| Total Pension Expense | $\$ 13,080.0$ | $\$ 12,932.5$ | $\$ 12,405.0$ | $\$(147.5)$ | $\$(675.0)$ |

[^14]Q. If no part of the prepaid pension asset is funded by customers, how do you account for the fact that the asset may increase in a year when the Company makes no contributions to the pension fund?
A. Prepaid pension is the mathematical formula: accumulated contributions less net periodic benefit costs. Like all mathematical formulas, it holds true when numbers are negative. The prepaid pension asset increases when contributions are zero in situations where the pension expense is negative. Typically, expenses are not negative (or they would be labeled as income items). A negative pension expense means that we are giving a benefit to our employees and recording income for providing this benefit. A reason that pension expense can be negative is when the Expected Return on Assets for the pension (again, a product of Company contributions to the pension fund) is larger than the other items that make up pension expense. The calculation of pension expense is shown in Table 6 above. If in Scenario \#1 the Expected Return on Assets was $\$ 20$ million higher than the pension expense due to a prepaid contribution, the pension expense would be a negative (income) $\$ 6.92$ million instead of the $\$ 13.08$ million expense. This situation would also be true for any other assets where expense and the asset balance are interrelated, and expense is negative. For example, if there is an adjustment to depreciation that makes depreciation negative for a year then property, plant and equipment (which is a rate base item) would increase even though the Company would not invest in property, plant and equipment for that year.

## Q. Can you prove this out using actual data?

A. Yes. The most helpful recent year to demonstrate this point is 2021. Due to the American Rescue Act in 2021, there were no contributions required in 2022; therefore, for purposes of this exercise we use the last year of actuals where the plan had both expense and contributions.

## Q. What was the 2021 amount of pension expense and who paid for it?

A. The customer has historically paid for pension expense. Looking at the actuals for 2021, pension expense was $\$ 8.4$ million ALLETE ( $\$ 5.1$ million MP regulated; $\$ 4.5$ million MN Jurisdictional). The amount allowed to be recovered from customers in 2021 (which
was established in the 2016 Rate Case and implemented into customer bills accordingly) was $\$ 5.2$ million. In every rate case since the PPA was enacted, Minnesota Power's revenue recovery for the pension fund has been established based on the expected pension expense.

## Q. What was the 2021 amount of pension contributions?

A. The 2021 amount of pension contributions were $\$ 10.3$ million ALLETE ( $\$ 7.0$ million MP regulated; \$6.2 million MN Jurisdictional).
Q. What is the amount of the pension contributions in excess of benefit costs for 2021?
A. The difference between the pension contributions of $\$ 6.2$ million MN Jurisdictional and pension expense of $\$ 5.2$ million recovered from customers resulted in a single year pension contribution in excess of benefit cost of $\$ 1.0$ million MN Jurisdictional.
Q. Who paid for the 2021 pension contributions in excess of net periodic benefit cost?
A. The Company, or more accurately its shareholders, paid for these contributions. While the accumulated contributions in excess of net periodic benefit costs for 2021 was $\$ 1.0$ million, the cumulative amount of accumulated contributions in excess of net periodic benefit costs since the PPA was enacted in 2008 and as reflected in Figure 4, is $\$ 102.2$ million MN Jurisdictional ( $\$ 143.7$ million of contributions less $\$ 41.5$ million of pension expense recovered by customers). This is also depicted in the yearly and cumulative analysis in MP Exhibit ___(Cutshall), Direct Schedule 1, and on an ALLETE basis, agrees to the Company's annual audited financial statements.

> ii. Prepaid pension asset balances are neither temporary, nor fundamentally different from typical rate-base assets.
Q. Are prepaid pension asset balances "temporary and fundamentally different from typical rate-base assets" on which the Company earns a return on investment?
A. No, they are not. The Company has carried a prepaid pension balance for at least the last 36 years and will have one for decades into the future, indicating its existence is not temporary. If, however, "temporary" means that an asset (and liability) balance typically
fluctuates throughout the year, and year over year, then virtually all utility asset and liability balances are temporary. But this means that the prepaid pension asset balance is not "fundamentally different from typical rate base assets."

The prepaid pension asset is consistent with other utility assets (i.e., physical assets), particularly items such as accounts receivable, accounts payable, inventory, materials and supplies, prepayments or accumulated deferred income taxes, that are included in rate base. Furthermore, the accumulated contributions in excess of net benefit cost asset is accounted for by using a 13-month average, the same as is done for other balances that vary over the year, such as inventory or other prepayments. No argument can be made that the prepaid pension asset is different because it is based on the prepayment of costs and the accrual of cash that earns a return solely for the benefit of customers, rather than on a physical asset. In fact, the decades-long existence of the prepaid pension asset means it is significantly more permanent than many of property, plant and equipment investments or other rate base assets.

Consistent with this discussion, in the Company's 2021 Rate Case, the Administrative Law Judge found that:

> "[A $] 11$ asset balances are "temporary" in the sense that they rise and fall as new investments are made and depreciation expense is recognized. The Company accounts for the changes in the prepaid pension asset balance by using a 13 -month average, as it does for other balances that vary over the year, such as materials and supplies. Additionally, the Company is required by ERISA and the Pension Protection Act to make contributions to the pension trust, just as the Company is required to make investments in physical assets such as transmission and distribution lines to provide service. The dollars contributed to the pension trust are real, out-of-pocket dollars provided by investors, just like dollars spent on physical assets, and investors are entitled to a return on those dollars comparable to the return available on other types of investments." 29

[^15]Q. Can you explain further why the prepaid pension asset is not "fundamentally different" from other kinds of assets?
A. Yes. Tax assets and liabilities are another example of how differences in timing of when the Company incurs a cost and pays the bill may result in assets and liabilities (or changes in the balances of assets and liabilities) in rate base. In the case of a liability like accumulated deferred income taxes, the utility, with Commission approval, has included the ADIT in rate base as a liability to customers to the extent that the Company realizes a tax deduction from the government prior to the period in which the customers receive the benefit of the deduction as a reduction in rates. ${ }^{30}$ The total quantity of ADIT increases if taxes are paid by customers before the Company must pay the government; and the quantity decreases in the opposite timing situation. This situation was the foundation of the Commission's determinations regarding the Tax Cuts and Job Act of 2017, affecting virtually all investor-owned utilities in Minnesota. Similarly, if pension expense exceeds the pension contributions in a given year, the prepaid pension asset will decline. If there is no prepaid pension asset, the utility may have a pension liability. Over the long run, pension contributions and pension expense will even out, but over the short and intermediate run there will almost certainly be differences that are recorded as prepaid pension assets or pension liabilities. This difference creates an asset or liability to which the return should be applied.

## Q. How did the Commission distinguish the prepaid pension asset from other assets that are typically included in rate base in the 2021 Rate Case?

A. The Commission concluded that the prepaid pension asset differs from other rate base assets because it "already earns a return in the form of investment returns, it fluctuates in value, and is misleading in that it does not account for the funding status of the entire pension plan."31

[^16]
## Q. Do these findings accurately reflect what occurs with respect to the prepaid pension asset?

A. Unfortunately, no. First, as discussed earlier, while there is a market return on the investments in the prepaid pension fund, this return is not a return for those funding the asset; rather, the investment return stays with the trust and accrues to the benefit of customers by reducing pension expense (and thus the corresponding expense amount included in rates).

Second, in addition to what I discussed previously, it is true that most asset values (i.e., asset balances as determined by the book value based on accounting records), fluctuate, typically other than land. In any given test year, the balance of an asset depends on the actual or forecasted balances for that year-not a recalculation of amounts previously recovered or not recovered via a representative test year. For example, in assessing depreciation, if a building depreciates, the Commission does not adjust the undepreciated balance because the amount of depreciation expense collected in rates over several years does not match the actual expense. Rather, the Commission evaluates and determines the correct balance based on the actual or forecasted balance in the test year at the time of setting rates. This principle, by which we correct imbalances as we go to reflect the most current information, is how the representative test year works for ratemaking purposes overall. Also, as mentioned earlier in my testimony, the Company uses all smoothing techniques allowed to determine the market-related value of assets which reduces volatility. While on the other hand, rate base is determined at a point in time where there can be more volatility or fluctuations.

Finally, the claim that the prepaid pension asset is misleading or does not account for the funded status improperly conflates the informational nature of the funded status with the actual measurement of the fund's balance of the prepaid pension asset. In any event, the plan's funded status is reflected in rate recovery based on the components of pension expense, as earlier described.
iii. The funded status of the plan is represented by the components of pension expense, and does not displace actual cash invested in excess of expense paid.

## Q. How do you address the Commission's concern that the status of the prepaid pension asset is misleading in that it does not represent the funded status of the pension plan?

A. This is irrelevant because they are two different financial measurements. The total obligations of the pension are actuarial estimates of amounts that may be paid to employees in the future; they are not like a debt because the factors that will actually come to pass to require payment (in the form of annual pension expense, based on employee data at the time the annual pension payments are actually due to the employee) are not yet known and the payment is not yet due. When pension payments to employees are actually due, they are paid from pension trust assets. In contrast, the asset exists when actual cash or stock contributions to fund exceed actual cumulative pension expense-meaning there is a measurable net amount of contributions that reflects actual cash investments in the retirement fund and which generates earnings that are being used to pay down expense. Thus, the difference between the asset and liabilities-i.e., the funded status-does not change the fact that there is an existing asset in the form of known contributions to the pension fund.

For example, at its core, a pension plan acts much like a savings account held by one person (company) for the benefit of and payments to another person. Based on a pension plan's characteristics-including the level of retirement benefits offered, vesting rules, the age and years of service of eligible employees, and the like-the Company is required by the PPA to estimate, on a rolling basis, the level of future benefits it will have to pay employees, and then make contributions to the pension fund to ensure adequate amounts will be available to pay employees when their benefit payouts are triggered. The pension fund itself is like a savings account in some ways, with the annual pension expense indicating the payments to employees.
A. Yes. Please see below.

|  | Past Commission Concerns | Response |
| :---: | :--- | :--- |
| 1. | Funding of the prepaid pension asset is <br> not entirely contributed by <br> shareholders. | All contributions to the prepaid pension asset are <br> made by shareholders. The customer funds only <br> expense. |
| 2. | Funding of the prepaid pension asset is <br> partially funded by market returns. | Market returns stay with the trust and reduce <br> expense, they do not reduce the contributions <br> paid by the Company. |
| 3. | The prepaid pension asset is temporary. | The prepaid pension asset has been existence for <br> at least 36 years and will be for many more <br> decades, much longer than many rate base assets, <br> and the Administrative Law Judge in the 2021 <br> Rate Case determined it is no more temporary <br> than other assets. |
| 4. | The prepaid pension asset is <br> fundamentally different because it <br> ituctuates. | The prepaid pension fluctuates, however, it <br> fluctuates less than other rate base items. |
| 5. | The prepaid pension asset is different <br> because it earns a return. | Investment earnings stay with the trust and <br> 100 percent of the earnings reduce pension <br> expense and thus customer rates. |
| 6. | The prepaid pension asset balance <br> doesn't account for the funded status of <br> the plan. | That is correct, because they measure two <br> different things. This has no bearing on the fact <br> the Company has funded significantly more than <br> it has recovered in rates. |

Q. Is denying a return on the prepaid pension asset helpful to encourage a utility to fund pension benefits for the benefit of employees who spend their careers serving customers?
A. No, it has just the opposite effect. It is advantageous to employees and to customers for the Company to fund the plan on a timely basis, as the investment earnings in the pension trust help assure payment of employee benefits and reduce the ultimate costs to customers. In addition, customers get the financial benefit of the Company's income tax deductions. Finally, if the Commission wants the pension plan to be fully funded, this requires additional contributions to the pension fund beyond the level of annual expense.
Q. Can you summarize the concerns and the Company's response to prior Minnesota rate case decisions regarding prepaid pension?

## b. Other State Outcomes

## Q. Do other state jurisdictions allow utilities to recover their accumulated

 contributions in excess of net periodic benefit cost?A. Yes. Many jurisdictions allow recovery for accumulated contributions in excess of net periodic benefit cost in one form or another. ${ }^{32}$ This was also addressed in the most recent EEI 2022-2023 Pension and Other Post-Employment Benefits Annual Survey where over sixty percent of respondents stated they were allowed rate base treatment or other recovery in all or some jurisdictions in which they operated. ${ }^{33}$

Another example includes a 2015 appellate court precedent in New Mexico that upheld the decision of the New Mexico Public Regulation Commission to allow rate base treatment for the "prepaid pension asset" of Southwestern Public Service Company. The Company recognizes these other states' appellate decisions and commission decisions are not binding on the Minnesota Commission, but they do clearly identify the issue and correctly apply federal law, and their straightforward and accurate reasoning for recognizing these assets should serve as persuasive guidance to the Commission.

[^17]Specifically, the New Mexico Supreme Court noted that a utility should be compensated for prepayments for both physical property and other investments on behalf of customers and employees:


#### Abstract

A utility can include prepayments for pension expenses in its rate base because the utility is out-of-pocket for such costs until they are recovered from ratepayers and is therefore entitled to recover its cost of financing such prepaid expenses. For example, in the context of prepaid pension assets, income earned on the pension fund is reported under [GAAP] as a reduction to the utility's pension expense. If that reduction in pension expense is used in determining a utility's rates, there will be a corresponding reduction in the amounts collected from ratepayers. Under these circumstances, the utility must finance the reduction because it cannot use the income from the pension trust to pay other current obligations; as a result, the utility is allowed to recover the costs of financing the reduction by including the pension income in the rate base.


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[\ldots]
$$

Basically, when a utility supplies working capital to fund contributions in excess of pension expenses to create an incomeproducing prepaid pension asset, the utility finances the entire cost of the prepaid pension asset. ${ }^{34}$

The Missouri Supreme Court has also recently addressed the inclusion of prepaid pension assets in rate base. In that case, the Public Service Commission of Missouri agreed that prepaid pension assets should be included in rate base but disagreed with the utility on the amount to be included in the pension asset. ${ }^{35}$ Thus, both Missouri's Public Service Commission and its Supreme Court acknowledge that prepaid pension assets are properly included in rate base.

[^18]And most importantly, the Company has a constitutional right to earn a return on its prepaid pension asset because it consists of investor-supplied funds used to pay for an employee benefit that is part of the cost of providing electric service to customers. ${ }^{36}$

## Q. Is there an alternative recommendation for the Company to recover partial

 compensation in relation to the accumulated contributions in excess of net periodic benefit cost asset?A. Yes. A partial solution would be what the Administrative Law Judge recommended in the recent rate case of Northern States Power Company, doing business as Xcel Energy ("Xcel Energy"). ${ }^{37}$ This would be to increase the annual pension expense by the degree to which it is currently reduced by applying the expected return on assets earned as a result of the Company contributions to the prepaid pension asset. Put differently, rather than allowing customers to receive all benefits from the Company's uncompensated investments in the pension fund, and rather than allowing the Company a return on those investments net of ADIT, the benefit of the Company contributions to the pension fund would be removed from the annual pension expense calculation. This would result in an increase to test year pension expense of $\$ 5,747,448 \mathrm{MN}$ Jurisdictional based on recovering the 2024 estimated 13-month average as reflected in MP Exhibit $\qquad$ (Cutshall), Direct Schedule 5.

Using this alternative, the Company would include the market return on the accumulated contributions in excess of net periodic benefit cost as an adjustment to operating income for pension expense. This alternative does not equate to a full return on this asset but provides an important retirement benefit to Company employees, and therefore does not fully compensate investors for their contributions. It does, however, address that customers are receiving a financial benefit from the market returns on the prepaid pension asset that reduce customers' pension expense, and therefore is preferable to and

[^19]more equitable than the current situation of earning no return on the accumulated contributions in excess of net periodic benefit cost.

## Q. Based on all of this information, please summarize the Company's request with respect to the accumulated contributions in excess of net periodic benefit cost.

A. Minnesota Power requests that the 13-month average balance for the 2024 test year (updated for actuals at the December 31, 2023, measurement date) of the accumulated contributions in excess of net periodic benefit cost, which is $\$ 86,688,516 \mathrm{MN}$ Jurisdictional, be included in rate base. The total rate base increase, net of the associated ADIT asset of $\$ 29,744,250 \mathrm{MN}$ Jurisdictional, would be $\$ 56,944,267 \mathrm{MN}$ Jurisdictional, and the Company requests that it be allowed the opportunity to earn a WACC return on this net asset - the same as it does on any other prepayments in rate base and the same as other U.S. utilities are allowed.

Because the accumulated contributions in excess of net periodic benefit cost represent contributions in excess of pension expense (recovered from customers), investor capital is required to fund those contributions; as such, investors should be permitted to earn a return on their capital.

Lastly, the Company reiterates that it is required by federal law to fund the pension plan and that customers benefit from these pension plan shareholder contributions because earnings on these contributions directly reduce pension expense and excluding these Company contributions from rates is directly contrary to Minn. Stat. § 216B.16, subd. 6, which requires that: "The commission, in the exercise of its powers under this chapter to determine just and reasonable rates for public utilities, shall give due consideration to the public need for adequate, efficient, and reasonable service and to the need of the public utility for revenue sufficient to enable it to meet the cost of furnishing the service." The Company's pension plan is part of its costs of furnishing service, and the Company has funded those pension benefits; therefore, exclusion of a significant portion of the costs of the pension plan from rate recovery is contrary to the law governing ratemaking in Minnesota. Accordingly, it is necessary to include the
accumulated contributions in excess of net periodic benefit cost in rate base to fully reimburse the Company (shareholders) for its reasonable and necessary utility costs to comply with federal law, which provides benefits to customers.

## III. OTHER POST-EMPLOYMENT BENEFITS

## Q. What is the purpose of this section of your Direct Testimony?

A. In this section of my testimony, I explain the Company's OPEB plans, the accounting for OPEB, and how the Company's OPEB expense amounts for the 2024 test year were derived. The Direct Testimony of Company witness Ms. Krollman provides background information on how employee post-employment (retirement) medical, dental, and life benefits plans fit into the Company's overall compensation and benefits strategy.

## Q. How many OPEB plans does the Company have and why?

A. ALLETE has two main types of OPEB plans because collectively bargained plans and non-bargained plans have different IRS rules for contributions and taxability:

- "Bargaining, union plan, or non-taxable plan" - Company contributions to bargained plans are fully deductible for tax purposes. In addition, similar to a pension plan, earnings are generally not taxed; and
- "Non-bargained plan or taxable plan" - Company contributions to nonbargained plans have deductibility limitations. In addition, these plans pay tax on their investment income.
Q. What amount of OPEB expense is included in Minnesota Power's 2024 test year?
A. The 2024 test year OPEB expense is negative $\$ 10,186,961$ ALLETE (negative \$7,337,814 MP regulated; negative $\$ 6,529,627 \mathrm{MN}$ Jurisdictional). For clarity, a negative expense is income.
Q. Why is OPEB expense expected to be negative in the 2024 test year?
A. OPEB expense is expected to be negative in the 2024 test year for two primary reasons: 1) the Expected Return on Plan Assets offsets the cost components of the expense
calculation; and 2) the cost savings from past benefit reductions will continue to be reflected in the expense for several more years.
Q. How was the Company's 2022 test year OPEB expense established in the Company's last approved rate case in 2023?
A. OPEB costs allowed by the Commission for the 2022 test year were based on the Company's forecasted 2022 expense.


## Q. What has the historical OPEB expense been?

A. ALLETE's OPEB was an expense from its inception in 1996 to 2012. Then-primarily due to benefit reductions and $\$ 145$ million of contributions through 2013 and the related earnings-the OPEB expense turned to a benefit in 2013; it has remained a negative expense through 2023. Below in Table 7 is the last five years of OPEB expense.

Table 7. Historical OPEB Expense/(Benefit) in \$ millions

| Year | ALLETE | MP Regulated | MN Jurisdictional |
| :---: | :---: | :---: | :---: |
| $\mathbf{2 0 1 9}$ | $(\$ 2.4)$ | $(\$ 1.8)$ | $(\$ 1.6)$ |
| $\mathbf{2 0 2 0}$ | $(\$ 8.6)$ | $(\$ 5.7)$ | $(\$ 5.1)$ |
| $\mathbf{2 0 2 1}$ | $(\$ 6.6)$ | $(\$ 4.6)$ | $(\$ 4.1)$ |
| $\mathbf{2 0 2 2}$ | $(\$ 9.5)$ | $(\$ 6.6)$ | $(\$ 5.9)$ |
| $\mathbf{2 0 2 3}$ Est. | $(\$ 12.1)$ | $(\$ 8.7)$ | $(\$ 7.7)$ |

## Q. Can you explain in more detail why the OPEB expense has been negative since 2013?

A. Yes. A main reason the OPEB benefit has persisted so long is because Minnesota Power has funded its OPEB plans at the expense level, as opposed to other utilities in Minnesota that have been allowed to not fund their plans, resulting in higher expenses. This has created significant investment income that has-along with benefit reduction measures-more than offset the other components of OPEB expense, which I will address later in my testimony. Minnesota Power's customers have benefitted from negative OPEB expenses since 2013 when it has served to both reduce the Company's
revenue requirement and provide well-earned benefits to retirees. However, this negative expense situation is very unusual but will likely continue in future years.

## Q. How do utilities fund OPEB plans and calculate OPEB expense?

A. There is no legal mandate to fund OPEB plans as there is for pension plans; however, utilities have typically funded their OPEB plans as mandated or agreed upon by their governing commissions. ALLETE's OPEB funding policy is to fund, at a minimum, its OPEB expense. The OPEB expense is determined by GAAP mandated by FASB and accepted by the SEC, which is similar to pension expense.

## Q. Why does the Company have the policy to fund OPEB expense?

A. On September 22, 1992, the Commission issued an Order adopting "SFAS 106 accrual accounting for Minnesota utility recordkeeping and ratemaking purposes."38 That Order stated, "SFAS 106 does not require funding for OPEB obligations." ${ }^{39}$ The Department, however, "recommended that external funding be required, in order to provide assurance of future payment of these obligations." ${ }^{40}$ In 1992, "the Commission required Xcel [Energy] to establish an external funding mechanism by its next general rate case for FAS 106."41 Later, Minnesota Power filed its 1994 rate case in which Company witness Bruce E. Gagnon testified-based largely on the Xcel Energy precedent-that " $[t]$ he Company intends to fund the SFAS 106 liabilities as the funds are collected." ${ }^{42}$ Since then, Minnesota Power has not only funded its expense-it has funded more than its expense.

[^20]On June 27, 2012, the Company requested the ability to determine on an annual basis whether to fund its post-employment benefit trust obligations; ${ }^{43}$ however, the Commission denied this request. ${ }^{44}$ One of the reasons for the denial was that the "request would appear to defeat the trust account's purpose, which is to ensure that funds are available to pay benefits when they are due., ${ }^{45}$

## Q. What is the benefit of contributions to fund the OPEB plan?

A. As with pension funding, by making contributions to the OPEB fund, investors are providing an assurance of future payments of these obligations and reducing annual expense amounts. For the 2024 test year, WTW projected that the earnings on these funds will reduce the OPEB expense by $\$ 10.2$ million ALLETE ( $\$ 7.3$ million MP regulated; $\$ 6.5$ million MN Jurisdictional).

## Q. Can you provide more detail explaining how the Company's annual OPEB expense

 is derived?A. Yes. Minnesota Power had the OPEB expense calculated by WTW using actuarial analyses, which are performed in accordance with ASC 715-60 Defined Benefit Plans — Other Postretirement ("ASC 715-60"). ASC 715-60 sets forth the methodologies and assumptions used to calculate OPEB expense.

ASC 715-60 requires the OPEB expense for a given year to be determined annually, which is calculated by WTW. In addition, the Company's independent auditor-PwCaudits the actuarial assumptions used to ensure compliance with GAAP.

## Q. Has the Company taken steps to reduce/control OPEB costs in recent years?

A. Yes. The Company has made several recent major changes, which are addressed in the Direct Testimony of Company witness Ms. Krollman and highlighted below:

[^21]1. Beginning on February 1, 2011, new employees were no longer eligible for OPEB health benefits;
2. Effective January 1, 2012, the age requirement for retiree health eligibility for those not already eligible was increased to age 55-up from age 50;
3. In 2013, health cost sharing for post-65 retirees was changed from 75 percent Company/ 25 percent retiree to 70 percent Company/30 percent retiree;
4. Post-employment life insurance for non-bargaining unit participants was eliminated unless the employee retired prior to January 1, 2016;
5. Minnesota Power added a high-deductible consumer-directed health plan option in 2014 and a second high-deductible consumer-directed health plan option in 2017;
6. Effective January 1, 2018, the pre-65 Preferred Provider Organization ("PPO") retiree health plan is no longer available to new retirees. Retiree medical-eligible participants retiring after January 1, 2018 must choose one of the pre-65 consumer directed health plan options. Any retiree that elected the pre-65 PPO retiree health plan prior to January 1, 2018 is eligible to keep PPO coverage for a maximum period of five years-i.e., through age 65 or December 31, 2022, if earlier-at which time any pre- 65 retirees with PPO coverage were transitioned to a consumer-directed health plan;
7. Effective April 1, 2018, post-employment life insurance for bargaining unit participants retiring after April 1, 2018 was changed to a $\$ 20,000$ death benefit for Minnesota Power employees. The death benefit for bargaining unit employees that retired prior to April 1, 2018 was equal to 50 percent of a participant's final salary before retirement;
8. Effective January 1, 2020 for the post- 65 group, the Company offers a Medicare Advantage Plan rather than a Medicare Supplement Plan. The Medicare Advantage Plan design shifts more first dollar-coverage responsibility to the participants; and
9. Effective January 1, 2024, the post-65 group will transition from the Medicare Advantage plan to an exchange, and will switch from a premium cost sharing
plan to a health reimbursement account with a flat contribution by the Company, all as further explained in Company witness Ms. Krollman's Direct Testimony.

## Q. What are the components of the 2024 OPEB calculation?

A. ALLETE's OPEB expense is determined in largely the same manner as pension expense-that is, by calculating and aggregating five components:

1. Service Cost - The present value (using the discount rate as described below) of the projected post-employment benefits earned by each employee in the current year;
2. Interest Cost - The amount the present value (using the discount rate as described below) of future benefit payments is expected to increase during the year due to one year's interest accrual. In other words, this is the expense incurred because the employees are one year closer to receiving their benefits;
3. Expected Return on Plan Assets - The amount expected to be earned on the plan's assets. It is estimated by multiplying the EROA by the five-year smoothed OPEB asset balance;
4. Amortization of Prior Service Cost - The amortization of the cost of increased/ decreased benefits, amortized over the remaining service life of the affected participants; and
5. Amortization of Net Gain or Loss - Gains or losses accumulate when the annual change in the benefit obligation or the plan assets deviate from expectations, e.g., the difference between the prior years' actual return on plan assets vs. the prior years' Expected Return on Plan Assets. If these accumulated gains or losses exceed 10 percent of the greater of the benefit obligation or plan assets, the excess is amortized over a period of time based on participant demographics.

## Q. What information did the actuary utilize to calculate the annual 2024 OPEB expense?

A. The primary OPEB assumptions used to estimate the Company's 2024 OPEB expense are listed below:

- Discount rate of 5.42 percent: ALLETE determines discount rate by considering a number of factors, though the primary consideration is the discount rate suggested by WTW's U.S. Bond:Link Model. This model creates a hypothetical portfolio of AA or better rated corporate bonds such that the subsequent cash flows produced are sufficient to fund projected benefit payments. The discount rate is estimated to be the yield on this hypothetical portfolio. The bonds in the model reflect the requirements of ASC 715-60 to utilize rates of high-quality debt securities. This methodology is the more precise than a simple yield curve approach, is one of the more selective approaches allowed by the SEC, and results in a higher discount rate (lower expense);
- EROA of 7.0 percent for non-taxable plans: This 7.0 percent rate is in line with WTW's 7.0 percent net of fee mid- or 50 percentile projection for the plan (see MP Exhibit ___ (Cutshall), Direct Schedule 8). ALLETE's taxable plan's EROA is 5.6 percent, or 80 percent of the non-taxable plan's EROA, because it assumes a 20 percent tax rate; and
- Health care trend rates: initial trend rate of 6.5 percent for 2023 with ultimate trend rate of 5.0 percent. This is very comparable to the EEI Pension and OPEB Survey 2022-2023 average initial trend rate of 6.47 percent and average ultimate trend rate of 4.69 percent (see MP Exhibit $\qquad$ (Cutshall), Direct Schedule 4).


## Q. Please provide an example how the EROA and the related investment earnings reduce OPEB expense?

A. As illustrated by Table 8, the EROA and related Expected Return on Plan Assets are the main OPEB expense reducer at negative $\$ 9.6$ million for 2022 . However, the amortization of prior service cost of negative $\$ 7.5$ million also reduced the cost of the OPEB plans and shows how the reduction of OPEB benefits has helped to reduce the Company's OPEB expense. ${ }^{46}$

[^22]Table 8. OPEB Expense Example Utilizing 2022 Actual and 2024 Expected Information (\$ in millions)

|  | 2022 <br> ALLETE <br> Actual | 2024 <br> ALLETE <br> Test Year | $\mathbf{2 0 2 4}$ <br> MP <br> Regulated <br> Test Year | $\mathbf{2 0 2 4}$ <br> MN <br> Jurisdictional <br> Test Year |
| :--- | :---: | ---: | ---: | ---: |
| Service cost | $\$ 2.9$ | $\$ 2.5$ | $\$ 1.8$ | $\$ 1.6$ |
| Interest cost | 4.3 | 5.9 | 4.3 | 3.8 |
| Amortization of loss / <br> (gain) | 0.4 | $(1.1)$ | $(0.8)$ | $(0.7)$ |
| Amortization of prior <br> service cost | $(7.5)$ | $(6.0)$ | $(4.3)$ | $(3.8)$ |
| Expected return on plan <br> assets | $(9.6)$ | $(11.5)$ | $(8.3)$ | $(7.4)$ |
| OPEB Expense | $\mathbf{\$ ( 9 . 5 )}$ | $\mathbf{\$ ( 1 0 . 2 )}$ | $\mathbf{\$ ( 7 . 3 )}$ | $\mathbf{\$ ( 6 . 5 )}$ |

Q. Does the OPEB expense calculation, like the pension expense calculation, incorporate a smoothing mechanism?
A. Yes, the OPEB expense calculation incorporates the same smoothing mechanisms as the pension expense, including use of the market-related value of assets, amortizations of prior service costs/(credits), amortizations of (gains)/losses, and the application of the corridor (described below) for determining if (gains)/losses need to be amortized.

For purposes of calculating OPEB expense, the Company utilizes all smoothing methods allowed under OPEB accounting rules (ASC 715-60) that are designed to reduce OPEB expense volatility. Under these methods:

- ALLETE uses a market-related value of assets in calculating expense. The market-related value of assets phases in gains or losses over a five-year period. This reduces volatility by using a more stable asset value to determine the Expected Return on Plan Assets component of expense. The market-related value of assets also reduces volatility in the amortization of gains and losses, described below, because recent gains and losses are excluded from the amortization calculation to the extent they are not phased in;
- ALLETE amortizes accumulated gains and losses, excluding gains and losses not yet phased into the market-related value of assets, in the OPEB expense.
- ALLETE uses a corridor to determine if gains and losses will be amortized in expense. The corridor is the greater of 10 percent of the plan's obligation or 10 percent of the plan's market-related value of assets.
- If accumulated gains and losses fall within the corridor, no gains and losses are amortized in expense.
- If accumulated gains and losses exceed the corridor, the excess is amortized over the average working lifetime of active participants or the average lifetime of inactive participants if there are no active participants in the plan; and
- Increases or decreases in plan liabilities resulting from plan amendments are amortized over the expected years to full eligibility age, which typically is the average working lifetime of the active participants affected by the plan amendment.


## Q. Is there an alternative way to recover OPEB expense?

A. Yes. As with the pension expense discussed previously, an alternative approach could be to use updated actuals as of the December 31, 2023 measurement date, which will be available in late January or early February 2024.

## Q. What do you recommend with respect to including OPEB costs in Minnesota Power's 2024 test year?

A. Similar to the pension expense, Minnesota Power supports recovery of the Company's actual 2024 OPEB expense as determined by the actuaries. Recovery of actual 2024 OPEB expense is the most accurate and consistent method for determining OPEB expense and was approved in the 2016 Rate Case and 2021 Rate Case. Using another method, such as an historic average, has the strong potential to distort the forecasting methodology required by the SEC and GAAP to measure the cost of the plan, thereby precluding the Company from recovering its actual costs of providing these benefits to utility employees. Further, historic averages do not incorporate changes in the economic
environment, or plan and assumption changes implemented by the Company, to help control the cost of the OPEB plans.

## IV. CONCLUSION

## Q. What are your overall recommendations for the 2024 test year?

A. Minnesota Power recommends recovery of the Company's forecasted 2024 pension expense of $\$ 4,228,176 \mathrm{MN}$ Jurisdictional and negative OPEB expense of $\$ 6,529,627$ MN Jurisdictional for a combined negative benefit expense of $\$ 2,301,451 \mathrm{MN}$ Jurisdictional, as determined by WTW. Minnesota Power also requests that the 13month average balance for the 2024 test year of the pension accumulated contributions in excess of net periodic benefit cost of $\$ 86,688,516 \mathrm{MN}$ Jurisdictional net of the associated ADIT asset of $\$ 29,744,250 \mathrm{MN}$ Jurisdictional, or $\$ 56,944,267 \mathrm{MN}$ Jurisdictional, to be included in rate base and earn a WACC return.

## Q. Does this complete your testimony?

A. Yes.


Per liformation Request 184 , Date July 31,2008 , Docket Number E015/GR-08-415. 2008 Test year was a half year (recovery amount includdes half of 2007 and 2008 recovery amounts).

The MN Jurisdicational Allocait





## Expected Return Estimator - Summary

| Asset Class Name | January 2022 | April 2023 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Expected 1 Year Return | Allocation | Expected 1 Year Return | Allocation |  |
| Large-Cap Stocks | 8.49\% | 14.7\% | 8.52\% | 14.7\% |  |
| Mid-Cap Stocks | 8.75\% | 6.9\% | 8.79\% | 7.0\% |  |
| Small-Cap Stocks | 8.75\% | 6.7\% | 8.79\% | 7.0\% |  |
| International Stocks | 8.92\% | 11.2\% | 8.96\% | 11.3\% |  |
| Emerging Markets | 11.61\% | 11.4\% | 11.61\% | 11.3\% |  |
| Long High Quality Bonds | 3.45\% | 48.1\% | 5.83\% | 47.7\% |  |
| Cash/Treasury Bills | 2.15\% | 1.0\% | 3.86\% | 1.0\% |  |
| Probability Distribution of Geometric Returns for 20 Years |  | Nominal* |  | Nominal* | Impact |
| 75th Percentile |  | 6.8\% |  | 7.9\% | +110bp |
| 50th Percentile |  | 5.7\% |  | 6.8\% | +110bp |
| 25th Percentile |  | 4.7\% |  | 5.8\% | +110bp |

[^23]EEI Member Companies
Per Company's 2022 Annual Report
Expected Return on Plan Assets and Fixed Income Allocation

| Company ${ }^{1}$ | Pension |  | Company ${ }^{1}$ | OPEB |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fixed Income Asset Allocation | Expected <br> Return on <br> Assets <br> (EROA) |  | Fixed Income Asset Allocation | Expected <br> Return on <br> Assets <br> (EROA) |
| First Energy | 15\% | 7.50\% | Avangrid | 6\% | 4.66\% |
| NextEra Energy | 20\% | 7.35\% | Dominion Energy | 8\% | 8.35\% |
| IDACORP | 24\% | 7.40\% | Duke Energy | 11\% | 6.50\% |
| Public Service Enterprise Group | 25\% | 7.20\% | Ameren Corporation | 13\% | 6.50\% |
| MGE Energy | 26\% | 6.75\% | Eversource Energy | 21\% | 8.25\% |
| Hawaiian Electric Industries | 27\% | 7.25\% | Public Service Enterprise Group | 25\% | 7.20\% |
| Southern Company | 28\% | 8.25\% | MGE Energy | 26\% | 6.40\% |
| Dominion Energy | 29\% | 7.68\% | Berkshire Hathaway Energy (MidAmerican Energy) | 27\% | 4.20\% |
| Xcel Energy | 30\% | 6.49\% | Hawaiian Electric Industries | 28\% | 7.25\% |
| Entergy Corporation | 33\% | 6.75\% | Southern Company | 28\% | 7.21\% |
| Avista Corporation | 34\% | 5.80\% | American Electric Power | 33\% | 5.50\% |
| Eversource Energy | 34\% | 8.25\% | First Energy | 34\% | 7.50\% |
| Ameren Corporation | 35\% | 6.50\% | Exelon Corporation | 35\% | 6.44\% |
| UGI Corporation | 36\% | 7.10\% | Puget Sound Energy | 35\% | 7.00\% |
| Evergy | 36\% | 6.71\% | NorthWestern Energy Corp | 37\% | 4.23\% |
| Alliant Energy | 37\% | 7.80\% | CMS Energy | 38\% | 6.50\% |
| Florida Public Utilies (Chesapeak Utilities Corp) | 38\% | 6.00\% | OGE Energy Corp | 38\% | 4.00\% |
| Sempra Energy | 38\% | 6.27\% | WEC Energy Group | 42\% | 7.00\% |
| Unitil Corporation | 38\% | 7.50\% | NiSource | 42\% | 5.72\% |
| WEC Energy Group | 39\% | 6.88\% | Unitil Corporation | 45\% | 7.50\% |
| Puget Sound | 40\% | 6.50\% | Sempra Energy | 46\% | 4.77\% |
| Exelon Corporation | 41\% | 7.00\% | PG\&E Corporation | 47\% | 5.50\% |
| Tampa Electric Company | 42\% | 6.50\% | PPL Corporation | 48\% | 6.52\% |
| Tennessee Valley Authority | 42\% | 5.75\% | ITC | 50\% | 4.50\% |
| Berkshire Hathaway Energy (MidAmerican Energy) | 43\% | 4.30\% | Consolidated Edison | 51\% | 6.80\% |
| NorthWestern Energy Corp | 45\% | 3.46\% | Evergy | 51\% | 4.53\% |
| Portland General Electric | 45\% | 6.75\% | Entergy | 57\% | 5.50\% |
| PPL Corporation | 46\% | 7.25\% | Xcel Energy | 57\% | 4.10\% |
| Avangrid | 47\% | 6.33\% | Edison International | 59\% | 3.50\% |
| CMS Energy | 47\% | 6.50\% | DTE Energy | 61\% | 6.40\% |
| Edison International | 47\% | 5.50\% | Portland General Electric | 61\% | 4.83\% |
| DTE Energy | 48\% | 6.80\% | Pinnacle West Capital Corporation | 62\% | 5.35\% |
| PG\&E Corporation | 49\% | 6.10\% | Alliant Energy | 64\% | 6.40\% |
| Consolidated Edison | 50\% | 7.00\% | PNM Resources | 70\% | 4.75\% |
| ITC | 50\% | 5.90\% | CenterPoint Energy | 74\% | 3.22\% |
| PNM Resources | 50\% | 5.50\% | MDU Resources Group | 80\% | 5.50\% |
| Otter Tail Corporation | 51\% | 6.30\% | Black Hills Corporation | 100\% | 1.70\% |
| American Electric Power | 52\% | 5.25\% | IDACORP | 100\% | 6.00\% |
| CenterPoint Energy | 53\% | 6.50\% | Average |  | 5.73\% |
| MDU Resources Group | 53\% | 6.00\% |  |  |  |
| OGE Energy Corp | 57\% | 7.00\% |  |  |  |
| Duke Energy | 60\% | 6.50\% |  |  |  |
| NiSource | 71\% | 4.80\% |  |  |  |
| Black Hills Corporation | 74\% | 4.25\% |  |  |  |
| AES Corporation | 77\% | 4.50\% |  |  |  |
| Pinnacle West Capital Corporation | 78\% | 5.00\% |  |  |  |
| Average |  | 6.48\% |  |  |  |

# PUBLIC DOCUMENT <br> TRADE SECRET DATA EXCISED IN ITS ENTIRETY 

# MP Exhibit__ (Cutshall), Direct Schedule 4 EEI Member Companies 2022 Annual Reports EROA PUB 

Minnesota Power
Working Capital Requirements
Prepaid Pension Asset

2024 Projected Budget Unadjusted

Projected
[1] Total 13 months - Dec 23 to Dec 24
[2] Total 13 months in [1] divided 13 months
[3] Dec-24 agrees to MP Exhibit ___ (Cutshall) Schedule 1, Column L. However, the MP Regulated ending prepaid in Column G of this schedule does not agree to Column R in Schedule 1 due calculating the prepaid differently between the schedules. In this schedule we apply the $\%$ allocators appropriately to the ending prepaid amount, while in Schedule 1 the \% allocators are applied to the annual contribution and expense amounts (rather than the ending prepaid) for instructive purposes.

# MP Exhibit (Cutshall) 

Prepaid Pension Balance Components and Earnings

| Year | Beginning <br> Prepaid | Contributions | Expense | Ending Prepaid (A+B-C) |
| :---: | :---: | :---: | :---: | :---: |
| 1987 | 3,908 | 4,054,160 | 4,053,454 | 4,614 |
| 1988 | 4,614 | 2,673,674 | 2,678,288 | 0 |
| 1989 | 0 | 2,466,133 | 2,466,133 | 0 |
| 1990 | 0 | 3,022,676 | 2,796,953 | 225,723 |
| 1991 | 225,723 | 5,724,650 | 2,321,988 | 3,628,385 |
| 1992 | 3,628,385 | 4,033,434 | 2,026,297 | 5,635,522 |
| 1993 | 5,635,522 | 4,008,886 | 1,904,872 | 7,739,536 |
| 1994 | 7,739,536 | 1,787,709 | 801,925 | 8,725,320 |
| 1995 | 8,725,320 | 3,621 | 2,323,762 | 6,405,179 |
| 1996 | 6,405,179 | - | 5,195,829 | 1,209,350 |
| 1997 | 1,209,350 | - | 4,596,632 | $(3,387,282)$ |
| 1998 | $(3,387,282)$ | - | $(459,478)$ | $(2,927,804)$ |
| 1999 | $(2,927,804)$ | - | $(3,922,267)$ | 994,463 |
| 2000 | 994,463 | - | $(8,497,214)$ | 9,491,677 |
| 2001 | 9,491,677 | - | $(9,567,909)$ | 19,059,586 |
| 2002 | 19,059,586 | - | $(6,975,895)$ | 26,035,481 |
| 2003 | 26,035,481 |  | ( $2,628,334$ ) | 28,663,815 |
| 2004 | 28,663,815 | 7,862,565 | 3,097,015 | 33,429,365 |
| 2005 | 33,429,365 |  | 4,951,308 | 28,478,057 |
| 2006 | 28,478,057 | 8,257,827 | 7,305,480 | 29,430,404 |
| 2007 | 29,430,404 | 187,819 | 1,096,191 | 28,522,032 |
| 2008 | 28,522,032 | 10,898,460 | $(577,913)$ | 39,998,405 |
| 2009 | 39,998,405 | 32,900,000 | 764,042 | 72,134,363 |
| 2010 | 72,134,363 | 26,500,000 | 4,603,064 | 94,031,299 |
| 2011 | 94,031,299 | 33,819,786 | 11,486,072 | 116,365,013 |
| 2012 | 116,365,013 | 7,292,000 | 16,174,087 | 107,482,926 |
| 2013 | 107,482,926 | - | 20,670,516 | 86,812,410 |
| 2014 | 86,812,410 | 19,499,040 | 12,522,446 | 93,789,004 |
| 2015 | 93,789,004 |  | 15,304,684 | 78,484,320 |
| 2016 | 78,484,320 | 6,300,180 | 5,285,744 | 79,498,756 |
| 2017 | 79,498,756 | 15,165,725 | 8,376,836 | 86,287,645 |
| 2018 | 86,287,645 | 15,000,000 | 5,590,407 | 95,697,238 |
| 2019 | 95,697,238 | 10,430,000 | 2,823,926 | 103,303,312 |
| 2020 | 103,303,312 | 10,679,000 | 6,970,212 | 107,012,100 |
| 2021 | 107,012,100 | 10,340,000 | 8,412,171 | 108,939,929 |
| 2022 | 108,939,929 | - | 5,028,072 | 103,911,857 |
| Est 2023 | 103,911,857 | 16,083,900 | 7,593,935 | 112,401,822 |
| Est 2024 | 112,401,822 | 24,659,231 | 7,442,304 | 129,618,749 |


| Pension Return ${ }^{1}$ | Current Year <br> Return on Prepaid ( $\left.\mathrm{E}^{*}(\mathrm{D}+\mathrm{A}) / 2\right)$ | Compounded Return (E*Prior yr H) | Cumulative Return (Prior yr H+F+G) |
| :---: | :---: | :---: | :---: |
| 8.00\% | 162,166 |  | 162,166 |
| 8.00\% | 185 | 12,973 | 175,324 |
| 8.50\% | 0 | 14,903 | 190,227 |
| 8.50\% | 9,593 | 16,169 | 215,989 |
| 8.50\% | 163,800 | 18,359 | 398,148 |
| 8.20\% | 379,820 | 32,648 | 810,617 |
| 14.20\% | 949,629 | 115,108 | 1,875,353 |
| -1.30\% | $(107,022)$ | $(24,380)$ | 1,743,952 |
| 24.08\% | 1,821,712 | 419,944 | 3,985,608 |
| 7.99\% | 304,200 | 318,450 | 4,608,259 |
| 18.82\% | $(204,943)$ | 867,274 | 5,270,590 |
| 7.94\% | $(250,709)$ | 418,485 | 5,438,366 |
| 18.14\% | $(175,354)$ | 986,520 | 6,249,531 |
| 4.48\% | 234,890 | 279,979 | 6,764,400 |
| -0.58\% | $(82,799)$ | $(39,234)$ | 6,642,367 |
| -7.36\% | $(1,659,499)$ | $(488,878)$ | 4,493,991 |
| 23.46\% | 6,416,228 | 1,054,290 | 11,964,508 |
| 9.81\% | 3,045,671 | 1,173,718 | 16,183,897 |
| 8.37\% | 2,590,826 | 1,354,592 | 20,129,315 |
| 15.60\% | 4,516,860 | 3,140,173 | 27,786,348 |
| 9.00\% | 2,607,860 | 2,500,771 | 32,894,979 |
| -28.71\% | $(9,836,109)$ | $(9,444,149)$ | 13,614,722 |
| 12.22\% | 6,851,312 | 1,663,719 | 22,129,753 |
| 14.95\% | 12,420,883 | 3,308,398 | 37,859,034 |
| 9.47\% | 9,962,265 | 3,585,251 | 51,406,550 |
| 10.00\% | 11,192,397 | 5,140,655 | 67,739,602 |
| 13.30\% | 12,920,640 | 9,009,367 | 89,669,610 |
| 7.70\% | 6,953,154 | 6,904,560 | 103,527,324 |
| -1.50\% | $(1,292,050)$ | $(1,552,910)$ | 100,682,364 |
| 10.70\% | 8,452,095 | 10,773,013 | 119,907,472 |
| 16.70\% | 13,843,165 | 20,024,548 | 153,775,184 |
| -4.00\% | $(3,639,698)$ | $(6,151,007)$ | 143,984,479 |
| 20.40\% | 20,298,056 | 29,372,834 | 193,655,369 |
| 14.30\% | 15,037,552 | 27,692,718 | 236,385,639 |
| 3.40\% | 3,671,185 | 8,037,112 | 248,093,935 |
| 6.04\% | 6,428,124 | 14,984,874 | 269,506,933 |
| 6.63\% | 7,170,798 | 17,868,310 | 294,546,041 |
| 6.63\% | 8,022,982 | 19,528,403 | 322,097,425 |

$\underline{\text { Minnesota Power }}$

| Beginning <br> Prepaid | Contributions | Expense | Ending Prepaid ( $1+\mathrm{J}-\mathrm{K}$ ) |
| :---: | :---: | :---: | :---: |
| 3,908 | 3,494,161 | 3,595,880 | (97,811) |
| $(97,811)$ | 2,524,039 | 2,473,877 | $(47,649)$ |
| $(47,649)$ | 2,363,712 | 2,296,507 | 19,556 |
| 19,556 | 2,857,720 | 2,676,231 | 201,045 |
| 201,045 | 5,465,766 | 2,254,234 | 3,412,577 |
| 3,412,577 | 3,863,684 | 1,988,166 | 5,288,095 |
| 5,288,095 | 3,946,376 | 1,799,683 | 7,434,788 |
| 7,434,788 | 1,759,800 | 915,109 | 8,279,479 |
| 8,279,479 | 3,621 | 2,310,410 | 5,972,690 |
| 5,972,690 | - | 5,082,778 | 889,912 |
| 889,912 | - | 4,487,292 | $(3,597,380)$ |
| $(3,597,380)$ | - | $(288,002)$ | $(3,309,378)$ |
| $(3,309,378)$ |  | $(3,638,076)$ | 328,698 |
| 328,698 |  | $(8,085,310)$ | 8,414,008 |
| 8,414,008 |  | $(8,842,843)$ | 17,256,851 |
| 17,256,851 | - | $(6,596,795)$ | 23,853,646 |
| 23,853,646 | - | $(2,575,796)$ | 26,429,442 |
| 26,429,442 | 7,472,521 | 2,671,488 | 31,230,475 |
| 31,230,475 |  | 4,404,096 | 26,826,379 |
| 26,826,379 | 7,384,548 | 6,582,927 | 27,628,000 |
| 27,628,000 | 187,819 | 706,320 | 27,109,499 |
| 27,109,499 | 9,786,816 | $(1,070,712)$ | 37,967,027 |
| 37,967,027 | 29,544,180 | 457,814 | 67,053,394 |
| 67,053,394 | 24,418,585 | 4,088,264 | 87,383,715 |
| 87,383,715 | 31,529,903 | 10,494,374 | 108,419,244 |
| 108,419,244 | 6,618,144 | 14,928,430 | 100,108,958 |
| 100,108,958 |  | 19,141,329 | 80,967,629 |
| 80,967,629 | 15,718,106 | 11,587,063 | 85,098,672 |
| 85,098,672 | - | 13,741,693 | 71,356,979 |
| 71,356,979 | 5,717,662 | 4,497,584 | 72,577,057 |
| 72,577,057 | 13,780,486 | 7,028,247 | 79,329,296 |
| 79,329,296 | 13,324,112 | 4,256,481 | 88,396,927 |
| 88,396,927 | 9,747,958 | 2,130,604 | 96,014,281 |
| 96,014,281 | 9,709,083 | 5,519,823 | 100,203,541 |
| 100,203,541 | 9,279,015 | 6,747,367 | 102,735,189 |
| 102,735,189 | - | 3,664,054 | 99,071,135 |
| 99,071,135 | 15,096,016 | 5,916,107 | 108,251,044 |
| 108,251,044 | 20,762,460 | 6,068,723 | 122,944,781 |


| Pension Return ${ }^{1}$ | Current Year Return on Prepaid (M*(L+I)/2) | Compounded Return (M*Prior yr P) | Cumulative Return (Prior yr P+N+O) |
| :---: | :---: | :---: | :---: |
| 8.00\% | $(3,756)$ |  | $(3,756)$ |
| 8.00\% | $(5,818)$ | (300) | $(9,875)$ |
| 8.50\% | $(1,194)$ | (839) | $(11,908)$ |
| 8.50\% | 9,376 | $(1,012)$ | $(3,545)$ |
| 8.50\% | 153,579 | (301) | 149,733 |
| 8.20\% | 356,728 | 12,278 | 518,738 |
| 14.20\% | 903,325 | 73,661 | 1,495,724 |
| -1.30\% | $(102,143)$ | $(19,444)$ | 1,374,137 |
| 24.08\% | 1,715,961 | 330,892 | 3,420,990 |
| 7.99\% | 274,161 | 273,337 | 3,968,488 |
| 18.82\% | $(254,773)$ | 746,870 | 4,460,585 |
| 7.94\% | $(274,198)$ | 354,170 | 4,540,557 |
| 18.14\% | $(270,348)$ | 823,657 | 5,093,867 |
| 4.48\% | 195,837 | 228,205 | 5,517,909 |
| -0.58\% | $(74,445)$ | $(32,004)$ | 5,411,459 |
| -7.36\% | $(1,512,866)$ | $(398,283)$ | 3,500,310 |
| 23.46\% | 5,898,206 | 821,173 | 10,219,689 |
| 9.81\% | 2,828,219 | 1,002,551 | 14,050,459 |
| 8.37\% | 2,429,679 | 1,176,023 | 17,656,162 |
| 15.60\% | 4,247,442 | 2,754,361 | 24,657,965 |
| 9.00\% | 2,463,187 | 2,219,217 | 29,340,369 |
| -28.71\% | $(9,341,735)$ | $(8,423,620)$ | 11,575,014 |
| 12.22\% | 6,416,748 | 1,414,467 | 19,406,228 |
| 14.95\% | 11,544,174 | 2,901,231 | 33,851,633 |
| 9.47\% | 9,271,270 | 3,205,750 | 46,328,653 |
| 10.00\% | 10,426,410 | 4,632,865 | 61,387,928 |
| 13.30\% | 12,041,593 | 8,164,594 | 81,594,116 |
| 7.70\% | 6,393,553 | 6,282,747 | 94,270,415 |
| -1.50\% | $(1,173,417)$ | $(1,414,056)$ | 91,682,941 |
| 10.70\% | 7,700,471 | 9,810,075 | 109,193,487 |
| 16.70\% | 12,684,181 | 18,235,312 | 140,112,980 |
| -4.00\% | $(3,354,524)$ | $(5,604,519)$ | 131,153,936 |
| 20.40\% | 18,809,943 | 26,755,403 | 176,719,283 |
| 14.30\% | 14,029,574 | 25,270,857 | 216,019,714 |
| 3.40\% | 3,449,958 | 7,344,670 | 226,814,343 |
| 6.04\% | 6,094,551 | 13,699,586 | 246,608,480 |
| 6.63\% | 6,872,730 | 16,350,142 | 269,831,353 |
| 6.63\% | 7,664,142 | 17,889,819 | 295,385,313 |

Minnesota Jurisdictional Allocation

```
12024 Minnesota Power prepaid from above
2 MN Power to MP Regulated Allocator
3 MN Power Regulated (1)*(2)
4 MN Jurisdictional Allocator
5 MN Jurisdictional (3)*(4)
```



| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Qualified Pension Plans | Total | Plan B | Plan C |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Disclosed Benefit Cost | 31-Dec-22 | 31-Dec-22 | 31-Dec-22 |
| A Disclosed Benefit Cost |  |  |  |
| 1 Employer service cost | 9,250,201 | 7,650,201 | 1,600,000 |
| 2 Interest cost | 26,478,570 | 9,154,543 | 17,324,027 |
| 3 Expected return on plan assets | $(41,488,143)$ | $(10,190,513)$ | (31,297,630) |
| 4 Subtotal | $(5,759,372)$ | 6,614,231 | $(12,373,603)$ |
| 5 Net prior service cost/(credit) amortization | $(73,813)$ | 75,205 | $(149,018)$ |
| 6 Net loss/(gain) amortization | 10,861,257 | 2,689,681 | 8,171,576 |
| 7 Subtotal | 10,787,444 | 2,764,886 | 8,022,558 |
| 8 Net periodic benefit cost/(income) | 5,028,072 | 9,379,117 | $(4,351,045)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Disclosed net benefit cost | 5,028,072 | 9,379,117 | (4,351,045) |
| B Presentation of Benefit Cost Pursuant to ASC 715-20 |  |  |  |
| 1 Employer service cost | 9,250,201 | 7,650,201 | 1,600,000 |
| 2 Other components of net periodic benefit cost | $(4,222,129)$ | 1,728,916 | $(5,951,045)$ |
| 3 Other adjustments to net benefit cost | 0 | 0 | 0 |
| 4 Disclosed net benefit cost | 5,028,072 | 9,379,117 | (4,351,045) |
| C Assumptions Used to Determine Benefit Cost |  |  |  |
| 1 Discount rate |  | 3.190\% | 3.000\% |
| 2 Expected long-term rate of return on plan assets |  | 6.000\% | 6.000\% |
| 3 Rate of compensation increase |  | 3.577\% | 0.000\% |
| 4 Pension increases for in-payment benefits |  | 2.000\% | 2.000\% |
| 5 Pension increases for deferred benefits |  | 0.000\% | 0.000\% |
| Balance Sheet Asset/(Liability) |  |  |  |
| A Development of Balance Sheet Asset/(Liability) |  |  |  |
| 1 Projected benefit obligation (PBO) | (720,460,359) | (217,239,567) | $(503,220,792)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 568,619,689 | 141,904,334 | 426,715,355 |
| 3 Net balance sheet asset/(liability) | (151,840,670) | $(75,335,233)$ | $(76,505,437)$ |
| B Current and Noncurrent Classification |  |  |  |
| 1 Noncurrent asset | 0 | 0 | 0 |
| 2 Current liability | 0 | 0 | 0 |
| 3 Noncurrent liability | (151,840,670) | $(75,335,233)$ | $(76,505,437)$ |
| 4 Net balance sheet asset/(liability) | (151,840,670) | $(75,335,233)$ | $(76,505,437)$ |
| C Reconciliation of Net Balance Sheet Asset/(Liability) |  |  |  |
| 1 Net balance sheet asset/(liability) at end of prior fiscal year | $(141,010,507)$ | $(106,021,787)$ | (34,988,720) |
| 2 Employer service cost | $(9,250,201)$ | $(7,650,201)$ | $(1,600,000)$ |
| 3 Interest cost | $(26,478,570)$ | $(9,154,543)$ | $(17,324,027)$ |
| 4 Expected return on plan assets | 41,488,143 | 10,190,513 | 31,297,630 |
| 5 Plan amendments | $(797,075)$ | $(797,075)$ | 0 |
| 6 Actuarial gain/(loss) | $(15,792,460)$ | 38,097,860 | $(53,890,320)$ |
| 7 Employer contributions | 0 | 0 | 0 |
| 8 Benefits paid directly by the Company | 0 | 0 | 0 |
| 9 Transfer payments | 0 | 0 | 0 |
| 10 Acquisitions/divestitures | 0 | 0 | 0 |
| 11 Curtailments | 0 | 0 | 0 |
| 12 Settlements (if settled using corporate cash) | 0 | 0 | 0 |
| 13 Special/contractual termination benefits | 0 | 0 | 0 |
| 14 Net balance sheet asset /(liability) at end of current fiscal year | (151,840,670) | $(75,335,233)$ | $(76,505,437)$ |
| D Assumptions and Dates Used for Disclosure |  |  |  |
| 1 Discount rate |  | 5.710\% | 5.690\% |
| 2 Rate of compensation increase |  | 3.557\% | 0.000\% |
| 3 Pension increases for in-payment benefits |  | 2.500\% | 2.500\% |
| 4 Pension increases for deferred benefits |  | 0.000\% | 0.000\% |
| 5 Census date |  | N/A | N/A |


| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Qualified Pension Plans | Total | Plan B | Plan C |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| A Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| 1 Net prior service cost/(credit) | $(82,826)$ | 721,870 | $(804,696)$ |
| 2 Net loss/(gain) | 255,835,353 | 21,368,514 | 234,466,839 |
| $3 \begin{aligned} & \text { Accumulated other comprehensive (income)/loss } \\ & \text { [Before adjustment for tax effects] }\end{aligned}$ | 255,752,527 | 22,090,384 | 233,662,143 |
| B Development of Accumulated Other Comprehensive (Income)/Loss (AOCI) |  |  |  |
| 1 AOCl at prior fiscal year end | 249,950,436 | 62,156,055 | 187,794,381 |
| 2 Amounts amortized during the year | 0 |  |  |
| a. Net prior service (cost)/credit | 73,813 | $(75,205)$ | 149,018 |
| b. Net (loss)/gain | $(10,861,257)$ | $(2,689,681)$ | $(8,171,576)$ |
| 3 Occurring during the year | 0 |  |  |
| a. Net prior service cost/(credit) | 797,075 | 797,075 | 0 |
| b. Net loss/(gain) | 15,792,460 | $(38,097,860)$ | 53,890,320 |
| 4 Amounts recognized due to curtailment/settlement | 0 |  |  |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 0 | 0 | 0 |
| 5 AOCl at current fiscal year end | 255,752,527 | 22,090,384 | 233,662,143 |

Additional Disclosure Information
A Accumulated Benefit Obligation (ABO)
1 ABO at current fiscal year end

| $(705,249,913)$ | $(202,029,121)$ | $(503,220,792)$ |
| ---: | ---: | ---: |
|  |  |  |
| $55,862,070$ | $10,598,142$ | $45,263,928$ |
| $56,271,807$ | $11,184,178$ | $45,087,629$ |
| $55,982,922$ | $11,707,412$ | $44,275,510$ |
| $55,468,516$ | $12,122,375$ | $43,346,141$ |
| $55,127,221$ | $12,550,218$ | $42,577,003$ |
| $266,438,616$ | $69,608,183$ | $196,830,433$ |
|  |  |  |
| $6,450,000$ | $6,450,000$ | 0 |
| 0 | 0 | 0 |

Changes in Disclosed Plan Obligations and Assets
A Change in Projected Benefit Obligation (PBO)

| 1 PBO at prior fiscal year end | $886,716,052$ | $598,999,184$ |
| :--- | ---: | ---: |
| 2 Employer service cost | $9,250,201$ | $1,600,000$ |
| 3 Interest cost | $26,478,570$ | $7,650,201$ |
| 4 Actuarial loss/(gain) | $(156,198,539)$ | $9,154,543$ |
| 5 Plan participants' contributions | 0 | $(80,419,421)$ |
| 6 Benefits paid from plan assets | $(54,933,024)$ | $(75,779,118)$ |
| 7 Benefits paid from Company assets | 0 | 0 |
| 8 Transfers from (to) other plans | $10,236,970$ | $(45,270,752)$ |
| 9 Administrative expenses paid | $(1,886,946)$ | 0 |
| 10 Plan amendments | 797,075 | 0 |
| 11 Acquisitions/(divestitures) | 0 | $(4,469,998$ |
| 12 Curtailments | 0 | $797,075)$ |
| 13 Settlements | 0 | 0 |
| 14 Special/contractual termination benefits | 0 | 0 |
| 15 PBO at current fiscal year end | $720,460,359$ | 0 |


| B Change in Plan Assets |  |  |
| :--- | :---: | :---: |
| 1 Fair value of plan assets at prior fiscal year end | $745,705,545$ | $181,695,081$ |
| 2 Actual return on plan assets | $(130,502,856)$ | $(32,131,048)$ |
| 3 Employer contributions | 0 | 0 |
| 4 Plan participants' contributions | 0 | 0 |
| 5 Benefits paid | $(54,933,024)$ | 0 |
| 6 Transfer payments | $10,236,970$ | $(9,662,272)$ |
| 7 Administrative expenses paid | $(1,886,946)$ | $(45,270,752)$ |
| 8 Acquisitions/(divestitures) | 0 | $(467,425)$ |
| 9 Settlements | 0 | $(1,419,521)$ |
| 10 Fair value of plan assets at current fiscal year end | $568,619,689$ | 0 |

## Reconciliation of Net Balances

A Reconciliation of Prior Service Cost/(Credit) Bases
1 Net amount at prior fiscal year end
2 Amortization amount
3 Plan amendments
4 Effect of curtail
5 Other events

|  | 0 | 0 | 0 |
| :--- | :---: | :---: | :---: |
| 6 Net amount at current fiscal year end | $(82,826)$ | 721,870 | $(804,696)$ |

B Reconciliation of Net Loss/(Gain)

| 1 Net amount at prior fiscal year end | $250,904,150$ | $62,156,055$ |
| :--- | ---: | ---: |
| 2 Amount recognized | $(10,861,257)$ | $(2,689,681)$ |
| 3 Experience loss/(gain) | $15,792,460$ | $(8,741,576)$ |
| 4 Effect of curtailments | 0 | $53,890,320$ |
| 5 Effect of settlements | 0 | 0 |
| 6 Other events | 0 | 0 |
| 7 Net amount at current fiscal year end | $255,835,353$ | 0 |


| ALLETE, Inc. |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Qualified Pension Plans | Total | Plan B | Plan C |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |

Development of Plan Assets for Benefit Cost

| A | Reconciliation of Fair Value of Plan Assets |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 Fair value of plan assets at 31-Dec-21 | 745,705,545 | 181,695,081 | 564,010,464 |
|  | 2 Actual return on plan assets | (130,502,856) | $(32,131,048)$ | $(98,371,808)$ |
|  | 3 Employer contributions | 0 | 0 | 0 |
|  | 4 Plan participants' contributions | 0 | 0 | 0 |
|  | 5 Benefits paid | $(44,696,054)$ | $(7,192,274)$ | $(37,503,780)$ |
|  | 6 Administrative expenses paid | $(1,886,946)$ | $(467,425)$ | $(1,419,521)$ |
|  | 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
|  | 8 Settlements | 0 | 0 | 0 |
|  | 9 Fair value of plan assets at 31-Dec-22 | 568,619,689 | 141,904,334 | 426,715,355 |
| B | Reconciliation of Market-Related Value of Plan Assets |  |  |  |
|  | 1 Market-related value of plan assets at 31-Dec-21 | 717,585,184 | 174,426,386 | 543,158,798 |
|  | 2 Actual return on plan assets | 11,341,443 | 3,518,514 | 7,822,929 |
|  | 3 Employer contributions | 0 | 0 | 0 |
|  | 4 Plan participants' contributions | 0 | 0 | 0 |
|  | 5 Benefits paid | $(44,696,054)$ | $(7,192,274)$ | $(37,503,780)$ |
|  | 6 Administrative expenses paid | $(1,886,946)$ | $(467,425)$ | $(1,419,521)$ |
|  | 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
|  | 8 Settlements | 0 | 0 | 0 |
|  | 9 Market-related value of plan assets at 31-Dec-22 | 682,343,627 | 170,285,201 | 512,058,426 |
| C | Rate of Return on Invested Assets |  |  |  |
|  | 1 Weighted invested assets | 722,414,044 | 177,865,231 | 544,548,813 |
|  | 2 Rate of return | (18.065\%) | (18.065\%) | (18.065\%) |
| D | Investment Loss/(Gain) |  |  |  |
|  | 1 Actual return | $(130,502,856)$ | $(32,131,048)$ | $(98,371,808)$ |
|  | 2 Expected return | 43,344,842 | 10,671,914 | 32,672,928 |
|  | 3 Loss/(gain) | 173,847,698 | 42,802,962 | 131,044,736 |
| E | Market-Related Value of Assets |  |  |  |
|  | 1 Fair value of plan assets at 31-Dec-22 | 568,619,689 | 141,904,334 | 426,715,355 |
|  | 2 Deferred investment (gains) and losses for the last 5 years <br> a. Deferred amount from measurement year ending 31-Dec-22 |  |  |  |
|  | i. (Gain)/ Loss | 173,847,698 | 42,802,962 | 131,044,736 |
|  | ii. Percent recognized | N/A | N/A | N/A |
|  | iii. Percent deferred | N/A | N/A | N/A |
|  | iv. Deferred amount | 139,078,159 | 34,242,370 | 104,835,789 |
|  | b. Deferred amount from measurement year ending 31-Dec-21 |  |  |  |
|  | i. (Gain)/ Loss | 25,379,677 | 4,072,469 | 21,307,208 |
|  | ii. Percent recognized | N/A | N/A | N/A |
|  | iii. Percent deferred | N/A | N/A | N/A |
|  | iv. Deferred amount | 15,227,806 | 2,443,481 | 12,784,325 |
|  | c. Deferred amount from measurement year ending 31-Dec-20 |  |  |  |
|  | ii. Percent recognized | N/A | N/A | N/A |
|  | iii. Percent deferred | N/A | N/A | N/A |
|  | iv. Deferred amount | $(19,463,199)$ | $(4,387,452)$ | $(15,075,747)$ |
|  | d. Deferred amount from measurement year ending 31-Dec-19 |  |  |  |
|  | ii. Percent recognized | N/A | N/A | N/A |
|  | iii. Percent deferred | N/A | N/A | N/A |
|  | iv. Deferred amount | $(16,247,409)$ | $(3,164,958)$ | $(13,082,451)$ |
|  | e. Deferred amount from measurement year ending 31-Dec-18 |  |  |  |
|  | i. (Gain) / Loss | 66,327,551 | 11,922,118 | 54,405,433 |
|  | ii. Percent recognized | N/A | N/A | N/A |
|  | iii. Percent deferred | N/A | N/A | N/A |
|  | iv. Deferred amount | 0 | 0 | 0 |
|  | f. Total deferred amount | 118,595,357 | 29,133,441 | 89,461,916 |
|  | 3 Market-related value of assets | 682,343,627 | 170,285,201 | 512,058,426 |


| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Qualified Pension Plans | Total | Plan B | Plan C |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Summary and Comparison of Benefit Cost and Cash Flows | 31-Dec-23 | 31-Dec-23 | 31-Dec-23 |
| A Total Benefit Cost |  |  |  |
| 1 Employer service cost | 6,484,490 | 4,884,490 | 1,600,000 |
| 2 Interest cost | 39,447,308 | 12,101,803 | 27,345,505 |
| 3 Expected return on plan assets | $(43,793,185)$ | $(11,980,465)$ | (31,812,720) |
| 4 Subtotal | 2,138,613 | 5,005,828 | $(2,867,215)$ |
| 5 Net prior service cost/(credit) amortization | $(66,977)$ | 82,041 | $(149,018)$ |
| 6 Net loss/(gain) amortization | 5,522,299 | 0 | 5,522,299 |
| 7 Subtotal | 5,455,322 | 82,041 | 5,373,281 |
| 8 Net periodic benefit cost/(income) | 7,593,935 | 5,087,869 | 2,506,066 |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Total benefit cost | 7,593,935 | 5,087,869 | 2,506,066 |
| B Assumptions |  |  |  |
| 1 Discount rate |  | 5.710\% | 5.690\% |
| 2 Expected long-term rate of return on plan assets |  | 7.000\% | 6.500\% |
| 3 Rate of compensation increase |  | 3.557\% | 0.000\% |
| 4 Pension increases for in-payment benefits |  | 2.500\% | 2.500\% |
| 5 Pension increases for deferred benefits |  | 0.000\% | 0.000\% |
| 6 Census date |  | N/A | N/A |
| c Plan Assets at Beginning of Year |  |  |  |
| 1 Fair value | 568,619,689 | 141,904,334 | 426,715,355 |
| 2 Market-related value | 682,343,627 | 170,285,201 | 512,058,426 |
| D Expected Cash Flows |  |  |  |
| 1 Employer contributions | 6,450,000 | 6,450,000 | 0 |
| 2 Plan participants' contributions | 0 | 0 | 0 |
| 3 Benefits paid from Company assets | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 55,862,070 | 10,598,142 | 45,263,928 |
| E Amortization Period | N/A | N/A | N/A |
| Participant Information - Census Date | N/A | N/A | N/A |
| A Participating Employees |  |  |  |
| 1 Number |  | 338 | 187 |
| 2 Average annual compensation/salary |  | 92,810 | N/A |
| 3 Average age |  | 48.86 | 53.03 |
| 4 Average credited service |  | 16.21 | 10.27 |
| B Participants with Deferred Benefits |  |  |  |
| 1 Number |  | 16 | 87 |
| 2 Average annual deferred benefits |  | 15,348 | 4,644 |
| 3 Average age |  | 44.19 | 54.39 |
| C Participants Receiving Benefits |  |  |  |
| 1 Number |  | 185 | 1,635 |
| 2 Average annual benefit payments |  | 51,516 | 27,600 |
| 3 Average age |  | 63.60 | 73.96 |
| D Other Participants |  |  |  |
| 1 Number |  | 0 | 0 |
| 2 Average annual benefit payments |  | N/A | N/A |
| 3 Average age |  | N/A | N/A |
| Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| Amortization Details of Plan Amendment \#1 |  |  |  |
| 1 Net amount at 31-Dec-21 |  | 0 | $(953,714)$ |
| 2 Amortization amount during 2022 |  | $(75,205)$ | 149,018 |
| 3 Effect of curtailments |  | 0 | 0 |
| 4 Other events |  | 797,075 | 0 |
| 5 Net amount at 31-Dec-22 |  | 721,870 | $(804,696)$ |
| 6 Remaining amortization period |  | 8.79889 | 5.40000 |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| A Reconciliation of Amounts Recognized in Statement of Financial Position |  |  |  |
| 1 Projected Benefit Obligation (PBO) | (720,460,359) | $(217,239,567)$ | (503,220,792) |
| 2 Fair value of plan assets, excluding receivable contributions | 568,619,689 | 141,904,334 | 426,715,355 |
| 3 Net balance sheet asset/(liability) | (151,840,670) | (75,335,233) | $(76,505,437)$ |
| 4 Net prior service cost/(credit) | $(82,826)$ | 721,870 | $(804,696)$ |
| 5 Net loss/(gain) | 255,835,353 | 21,368,514 | 234,466,839 |
| 6 Accumulated Employer contributions in excess of net periodic benefit cost | 103,911,857 | (53,244,849) | 157,156,706 |
| B Accumulated Employer Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| 1 Amount as of beginning of year | 108,939,929 | $(43,865,732)$ | 152,805,661 |
| 2 Net periodic postretirement benefit (cost)/income | $(5,028,072)$ | $(9,379,117)$ | 4,351,045 |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 0 | 0 | 0 |
| 5 Benefits paid from Company assets | 0 | 0 | 0 |
| 6 Other recognized loss/(gain) | 0 | 0 | 0 |
| 7 Other adjustments | 0 | 0 | 0 |
| 8 Amount as of end of year | 103,911,857 | (53,244,849) | 157,156,706 |


| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Plan B <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Total USD | Water, Light and Power USD | Minnesota Power USD |
| Disclosed Benefit Cost | 31-Dec-22 | 31-Dec-22 | 31-Dec-22 |
| A Disclosed Benefit Cost |  |  |  |
| 1 Employer service cost | 7,650,201 | 1,310,299 | 6,339,902 |
| 2 Interest cost | 9,154,543 | 1,039,747 | 8,114,796 |
| 3 Expected return on plan assets | $(10,190,513)$ | $(1,099,371)$ | (9,091,142) |
| 4 Subtotal | 6,614,231 | 1,250,675 | 5,363,556 |
| 5 Net prior service cost/(credit) amortization | 75,205 | 75,205 | 0 |
| 6 Net loss/(gain) amortization | 2,689,681 | 362,987 | 2,326,694 |
| 7 Subtotal | 2,764,886 | 438,192 | 2,326,694 |
| 8 Net periodic benefit cost/(income) | 9,379,117 | 1,688,867 | 7,690,250 |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Disclosed net benefit cost | 9,379,117 | 1,688,867 | 7,690,250 |
| B Presentation of Benefit Cost Pursuant to ASC 715-20 |  |  |  |
| 1 Employer service cost | 7,650,201 | 1,310,299 | 6,339,902 |
| 2 Other components of net periodic benefit cost | 1,728,916 | 378,568 | 1,350,348 |
| 3 Other adjustments to net benefit cost | 0 | 0 | 0 |
| 4 Disclosed net benefit cost | 9,379,117 | 1,688,867 | 7,690,250 |
| C Assumptions Used to Determine Benefit Cost |  |  |  |
| 1 Discount rate | 3.190\% | 3.408\% | 3.160\% |
| 2 Expected long-term rate of return on plan assets | 6.000\% | 6.000\% | 6.000\% |
| 3 Rate of compensation increase | 3.577\% | 3.577\% | 3.577\% |
| 4 Pension increases for in-payment benefits | 2.000\% | 2.000\% | 2.000\% |
| 5 Pension increases for deferred benefits | 0.000\% | 0.000\% | 0.000\% |
| Balance Sheet Asset/(Liability) |  |  |  |
| A Development of Balance Sheet Asset/(Liability) |  |  |  |
| 1 Projected benefit obligation (PBO) | $(217,239,567)$ | (24,984,913) | (192,254,654) |
| 2 Fair value of plan assets, excluding receivable contributions | 141,904,334 | 15,362,313 | 126,542,021 |
| 3 Net balance sheet asset/(liability) | $(75,335,233)$ | (9,622,600) | $(65,712,633)$ |
| B Current and Noncurrent Classification |  |  |  |
| 1 Noncurrent asset | 0 | 0 | 0 |
| 2 Current liability | 0 | 0 | 0 |
| 3 Noncurrent liability | (75,335,233) | $(9,622,600)$ | (65,712,633) |
| 4 Net balance sheet asset/(liability) | $(75,335,233)$ | $(9,622,600)$ | $(65,712,633)$ |
| C Reconciliation of Net Balance Sheet Asset/(Liability) |  |  |  |
| 1 Net balance sheet asset/(liability) at end of prior fiscal year | $(106,021,787)$ | $(11,896,266)$ | $(94,125,521)$ |
| 2 Employer service cost | $(7,650,201)$ | $(1,310,299)$ | $(6,339,902)$ |
| 3 Interest cost | $(9,154,543)$ | $(1,039,747)$ | $(8,114,796)$ |
| 4 Expected return on plan assets | 10,190,513 | 1,099,371 | 9,091,142 |
| 5 Plan amendments | $(797,075)$ | $(797,075)$ | 0 |
| 6 Actuarial gain/(loss) | 38,097,860 | 4,321,416 | 33,776,444 |
| 7 Employer contributions | 0 | 0 | - |
| 8 Benefits paid directly by the Company | 0 | 0 | 0 |
| 9 Transfer payments | 0 | 0 | 0 |
| 10 Acquisitions/divestitures | 0 | 0 | 0 |
| 11 Curtailments | 0 | 0 | 0 |
| 12 Settlements (if settled using corporate cash) | 0 | 0 | 0 |
| 13 Special/contractual termination benefits | 0 | 0 | 0 |
| 14 Net balance sheet asset /(liability) at end of current fiscal year | $(75,335,233)$ | (9,622,600) | $(65,712,633)$ |
| D Assumptions and Dates Used for Disclosure |  |  |  |
| 1 Discount rate | 5.710\% | 5.710\% | 5.710\% |
| 2 Rate of compensation increase | 3.557\% | 3.961\% | 3.504\% |
| 3 Pension increases for in-payment benefits | 2.500\% | 2.500\% | 2.500\% |
| 4 Pension increases for deferred benefits | 0.000\% | 0.000\% | 0.000\% |
| 5 Census date | N/A | 1-Jan-22 | 1-Jan-22 |


| LLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Plan B <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Superior Water, Lightand Power |  | Minnesota Power USD |
| Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| A Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| 1 Net prior service cost/(credit) | 721,870 | 721,870 | 0 |
| 2 Net loss/(gain) | 21,368,514 | 2,504,072 | 18,864,442 |
| $3 \begin{aligned} & \text { Accumulated other comprehensive (income)/loss } \\ & \text { [Before adjustment for tax effects] }\end{aligned}$ | 22,090,384 | 3,225,942 | 18,864,442 |
| B Development of Accumulated Other Comprehensive (Income)/Loss (AOCI) |  |  |  |
| 1 AOCl at prior fiscal year end | 62,156,055 | 7,188,475 | 54,967,580 |
| 2 Amounts amortized during the year |  |  |  |
| a. Net prior service (cost)/credit | $(75,205)$ | $(75,205)$ | 0 |
| b. Net (loss)/gain | $(2,689,681)$ | $(362,987)$ | $(2,326,694)$ |
| 3 Occurring during the year |  |  |  |
| a. Net prior service cost/(credit) | 797,075 | 797,075 | 0 |
| b. Net loss/(gain) | $(38,097,860)$ | $(4,321,416)$ | $(33,776,444)$ |
| 4 Amounts recognized due to curtailment/settlement |  |  |  |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 0 | 0 | 0 |
| 5 AOCl at current fiscal year end | 22,090,384 | 3,225,942 | 18,864,442 |

Additional Disclosure Information
A Accumulated Benefit Obligation (ABO)
1 ABO at current fiscal year end
(202,029,121)
$(23,150,996)$
$(178,878,125)$
B Expected Future Benefit Payments
1 During fiscal year ending December 31, 2023
2 During fiscal year ending December 31, 2024

| $10,598,142$ | $1,128,051$ | $9,470,091$ |
| ---: | ---: | ---: |
| $11,184,178$ | $1,190,945$ | $9,993,233$ |
| $11,707,412$ | $1,235,447$ | $10,471,965$ |
| $12,122,375$ | $1,294,418$ | $10,827,957$ |
| $12,550,218$ | $1,346,121$ | $11,204,097$ |
| $69,608,183$ | $7,812,022$ | $61,796,161$ |
|  |  |  |
| $6,450,000$ | 830,000 | $5,620,000$ |
| 0 | 0 | 0 |

Changes in Disclosed Plan Obligations and Assets
A Change in Projected Benefit Obligation (PBO
1 PBO at prior fiscal year e
2 Employer service cost

| $287,716,868$ | $31,429,620$ | $256,287,248$ |
| ---: | ---: | ---: |
| $7,650,201$ | $1,310,299$ | $6,339,902$ |
| $9,154,543$ | $1,039,747$ | $8,114,796$ |
| $(80,419,421)$ | $(8,885,671)$ | $(71,533,750)$ |
| 0 | 0 | 0 |
| $(9,662,272)$ | $(1,089,254)$ | $(8,573,018)$ |
| 0 | 0 | 0 |
| $2,469,998$ | 456,810 | $2,013,188$ |
| $(467,425)$ | $(73,713)$ | $(393,712)$ |
| 797,075 | 797,075 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| $217,239,567$ | $24,984,913$ | $192,254,654$ |

B Change in Plan Assets

| Change in Plan Assets |  |  |
| :--- | :---: | :---: |
| 1 Fair value of plan assets at prior fiscal year end | $181,695,081$ | $19,533,354$ |
| 2 Actual return on plan assets | $(32,131,048)$ | $(3,464,884)$ |
| 3 Employer contributions | 0 | $(28,666,164)$ |
| 4 Plan participants' contributions | 0 | 0 |
| 5 Benefits paid | $(9,662,272)$ | 0 |
| 6 Transfer payments | $2,469,998$ | $(1,089,254)$ |
| 7 Administrative expenses paid | $(467,425)$ | $(8,573,018)$ |
| 8 Acquisitions/(divestitures) | 0 | $(73,713)$ |
| 9 Settlements | 0 | 0 |
| 10 Fair value of plan assets at current fiscal year end | $141,904,334$ | $(393,712)$ |

## Reconciliation of Net Balances

A Reconciliation of Prior Service Cost/(Credit) Bases
1 Net amount at prior fiscal year end
2 Amortization amount
3 Plan amendments
4 Effect of curtailments
5 Other events

|  | 0 | 0 |
| :--- | ---: | ---: |
| 6 Net amount at current fiscal year end | 721,870 | 721,870 |

B Reconciliation of Net Loss/(Gain)

| Reconciliation of Net Loss/(Gain) |  |  |
| :--- | ---: | ---: |
| 1 Net amount at prior fiscal year end | $62,156,055$ | $7,188,475$ |
| 2 Amount recognized | $(2,689,681)$ | $(3,962,987)$ |
| 3 Experience loss/(gain) | $(38,097,860)$ | $(3,580$ |
| 4 Effect of curtailments | 0 | $(4,321,416)$ |
| 5 Effect of settlements | 0 | 0 |
| 6 Other events | 0 | 0 |
| 7 Net amount at current fiscal year end | $21,368,514$ | 0 |

The information contained in this exhibit is incomplete without the supporting letter.

| ALLETE, Inc. |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Plan B | Total | Superior Water, Light  <br> and Power Minnesota Power <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP USD | USD | USD |

## Development of Plan Assets for Benefit Cost



| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Plan B | Total | Superior Water, Light and Power | Minnesota Power |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Summary and Comparison of Benefit Cost and Cash Flows | 31-Dec-23 | 31-Dec-23 | 31-Dec-23 |
| A Total Benefit Cost |  |  |  |
| 1 Employer service cost | 4,884,490 | 787,403 | 4,097,087 |
| 2 Interest cost | 12,101,803 | 1,394,433 | 10,707,370 |
| 3 Expected return on plan assets | $(11,980,465)$ | $(1,306,471)$ | $(10,673,994)$ |
| 4 Subtotal | 5,005,828 | 875,365 | 4,130,463 |
| 5 Net prior service cost/(credit) amortization | 82,041 | 82,041 | 0 |
| 6 Net loss/(gain) amortization |  | - | 0 |
| 7 Subtotal | 82,041 | 82,041 | 0 |
| 8 Net periodic benefit cost/(income) | 5,087,869 | 957,406 | 4,130,463 |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Total benefit cost | 5,087,869 | 957,406 | 4,130,463 |
| B Assumptions |  |  |  |
| 1 Discount rate | 5.710\% | 5.710\% | 5.710\% |
| 2 Expected long-term rate of return on plan assets | 7.000\% | 7.000\% | 7.000\% |
| 3 Rate of compensation increase | 3.557\% | 3.961\% | 3.504\% |
| 4 Pension increases for in-payment benefits | 2.500\% | 2.500\% | 2.500\% |
| 5 Pension increases for deferred benefits | 0.000\% | 0.000\% | 0.000\% |
| 6 Census date | N/A | 1-Jan-22 | 1-Jan-22 |
| C Plan Assets at Beginning of Year |  |  |  |
| 1 Fair value | 141,904,334 | 15,362,313 | 126,542,021 |
| 2 Market-related value | 170,285,201 | 18,434,776 | 151,850,425 |
| D Expected Cash Flows |  |  |  |
| 1 Employer contributions | 6,450,000 | 830,000 | 5,620,000 |
| 2 Plan participants' contributions | 0 | 0 | 0 |
| 3 Benefits paid from Company assets | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 10,598,142 | 1,128,051 | 9,470,091 |
| E Amortization Period | N/A | 12.36332 | 8.87891 |
| Participant Information - Census Date | N/A | 1-Jan-22 | 1-Jan-22 |
| A Participating Employees |  |  |  |
| 1 Number | 338 | 61 | 277 |
| 2 Average annual compensation/salary | 92,810 |  |  |
| 3 Average age | 48.86 |  |  |
| 4 Average credited service | 16.21 |  |  |
| B Participants with Deferred Benefits |  |  |  |
| 1 Number | 16 | 4 | 12 |
| 2 Average annual deferred benefits | 15,348 |  |  |
| 3 Average age | 44.19 |  |  |
| C Participants Receiving Benefits |  |  |  |
| 1 Number | 185 | 20 | 165 |
| 2 Average annual benefit payments | 51,516 |  |  |
| 3 Average age | 63.60 |  |  |
| D Other Participants |  |  |  |
| 1 Number | 0 | 0 | 0 |
| 2 Average annual benefit payments | N/A |  |  |
| 3 Average age | N/A |  |  |
| Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| Amortization Details of Plan Amendment \#1 |  |  |  |
| 1 Net amount at 31-Dec-21 | N/A | 0 | N/A |
| 2 Amortization amount during 2022 | N/A | $(75,205)$ | N/A |
| 3 Effect of curtailments | N/A | 0 | N/A |
| 4 Other events | N/A | 797,075 | N/A |
| 5 Net amount at 31-Dec-22 | N/A | 721,870 | N/A |
| 6 Remaining amortization period | N/A | 8.79889 | N/A |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| A Reconciliation of Amounts Recognized in Statement of Financial Position |  |  |  |
| 1 Projected Benefit Obligation (PBO) | $(217,239,567)$ | (24,984,913) | $(192,254,654)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 141,904,334 | 15,362,313 | 126,542,021 |
| 3 Net balance sheet asset/(liability) | (75,335,233) | (9,622,600) | $(65,712,633)$ |
| 4 Net prior service cost/(credit) | 721,870 | 721,870 | 0 |
| $5 \mathrm{Net} \mathrm{lossl/(gain)}$ | 21,368,514 | 2,504,072 | 18,864,442 |
| 6 Accumulated Employer contributions in excess of net periodic benefit cost | (53,244,849) | $(6,396,658)$ | $(46,848,191)$ |
| B Accumulated Employer Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| 1 Amount as of beginning of year | $(43,865,732)$ | $(4,707,791)$ | $(39,157,941)$ |
| 2 Net periodic postretirement benefit (cost)/income | $(9,379,117)$ | $(1,688,867)$ | $(7,690,250)$ |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 0 | 0 | 0 |
| 5 Benefits paid from Company assets | 0 | 0 | 0 |
| 6 Other recognized loss/(gain) | 0 | 0 | 0 |
| 7 Other adjustments | 0 | 0 | 0 |
| 8 Amount as of end of year | (53,244,849) | $(6,396,658)$ | $(46,848,191)$ |


| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Plan C <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Total USD | Water, Light and Power USD | Minnesota Power USD |
| Disclosed Benefit Cost | 31-Dec-22 | 31-Dec-22 | 31-Dec-22 |
| A Disclosed Benefit Cost |  |  |  |
| 1 Employer service cost | 1,600,000 | 119,853 | 1,480,147 |
| 2 Interest cost | 17,324,027 | 1,232,075 | 16,091,952 |
| 3 Expected return on plan assets | (31,297,630) | $(2,081,948)$ | $(29,215,682)$ |
| 4 Subtotal | $(12,373,603)$ | $(730,020)$ | $(11,643,583)$ |
| 5 Net prior service cost/(credit) amortization | $(149,018)$ | $(10,957)$ | $(138,061)$ |
| 6 Net loss/(gain) amortization | 8,171,576 | 703,300 | 7,468,276 |
| 7 Subtotal | 8,022,558 | 692,343 | 7,330,215 |
| 8 Net periodic benefit cost/(income) | $(4,351,045)$ | $(37,677)$ | $(4,313,368)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Disclosed net benefit cost | $(4,351,045)$ | $(37,677)$ | $(4,313,368)$ |
| B Presentation of Benefit Cost Pursuant to ASC 715-20 |  |  |  |
| 1 Employer service cost | 1,600,000 | 119,853 | 1,480,147 |
| 2 Other components of net periodic benefit cost | $(5,951,045)$ | $(157,530)$ | $(5,793,515)$ |
| 3 Other adjustments to net benefit cost | 0 | 0 | 0 |
| 4 Disclosed net benefit cost | $(4,351,045)$ | $(37,677)$ | $(4,313,368)$ |
| C Assumptions Used to Determine Benefit Cost |  |  |  |
| 1 Discount rate | 3.000\% | 3.000\% | 3.000\% |
| 2 Expected long-term rate of return on plan assets | 6.000\% | 6.000\% | 6.000\% |
| 3 Rate of compensation increase | 0.000\% | 0.000\% | 0.000\% |
| 4 Pension increases for in-payment benefits | 2.000\% | 2.000\% | 2.000\% |
| 5 Pension increases for deferred benefits | 0.000\% | 0.000\% | 0.000\% |
| Balance Sheet Asset/(Liability) |  |  |  |
| A Development of Balance Sheet Asset/(Liability) |  |  |  |
| 1 Projected benefit obligation (PBO) | $(503,220,792)$ | (35,645,813) | $(467,574,979)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 426,715,355 | 27,755,948 | 398,959,407 |
| 3 Net balance sheet asset/(iability) | $(76,505,437)$ | $(7,889,865)$ | (68,615,572) |
| B Current and Noncurrent Classification |  |  |  |
| 1 Noncurrent asset | 0 | 0 | 0 |
| 2 Current liability | 0 | 0 | 0 |
| 3 Noncurrent liability | $(76,505,437)$ | $(7,889,865)$ | $(68,615,572)$ |
| 4 Net balance sheet asset/(liability) | $(76,505,437)$ | $(7,889,865)$ | $(68,615,572)$ |
| C Reconciliation of Net Balance Sheet Asset/(Liability) |  |  |  |
| 1 Net balance sheet asset/(liability) at end of prior fiscal year | $(34,988,720)$ | $(4,912,132)$ | $(30,076,588)$ |
| 2 Employer service cost | $(1,600,000)$ | $(119,853)$ | $(1,480,147)$ |
| 3 Interest cost | $(17,324,027)$ | $(1,232,075)$ | $(16,091,952)$ |
| 4 Expected return on plan assets | 31,297,630 | 2,081,948 | 29,215,682 |
| 5 Plan amendments | 0 | 0 | 0 |
| 6 Actuarial gain/(loss) | $(53,890,320)$ | $(3,707,753)$ | $(50,182,567)$ |
| 7 Employer contributions | 0 | 0 | 0 |
| 8 Benefits paid directly by the Company | 0 | 0 | 0 |
| 9 Transfer payments | 0 | 0 | 0 |
| 10 Acquisitions/divestitures | 0 | 0 | 0 |
| 11 Curtailments | 0 | 0 | 0 |
| 12 Settlements (if settled using corporate cash) | 0 | 0 | 0 |
| 13 Special/contractual termination benefits | 0 | 0 | 0 |
| 14 Net balance sheet asset /(liability) at end of current fiscal year | $(76,505,437)$ | (7,889,865) | (68,615,572) |
| D Assumptions and Dates Used for Disclosure |  |  |  |
| 1 Discount rate | 5.690\% | 5.690\% | 5.690\% |
| 2 Rate of compensation increase | 0.000\% | 0.000\% | 0.000\% |
| 3 Pension increases for in-payment benefits | 2.500\% | 2.500\% | 2.500\% |
| 4 Pension increases for deferred benefits | 0.000\% | 0.000\% | 0.000\% |
| 5 Census date | N/A | 1-Jan-22 | 1-Jan-22 |


| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Plan C <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Superior Water, Lightand Power |  | Minnesota Power |
| Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| A Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| 1 Net prior service cost/(credit) | $(804,696)$ | $(59,165)$ | $(745,531)$ |
| 2 Net loss/(gain) | 234,466,839 | 18,707,970 | 215,758,869 |
| $3 \begin{aligned} & \text { Accumulated other comprehensive (income)/loss } \\ & \text { [Before adjustment for tax effects] }\end{aligned}$ | 233,662,143 | 18,648,805 | 215,013,338 |
| B Development of Accumulated Other Comprehensive (Income)/Loss (AOCI) |  |  |  |
| 1 AOCl at prior fiscal year end | 187,794,381 | 15,633,395 | 172,160,986 |
| 2 Amounts amortized during the year |  |  |  |
| a. Net prior service (cost)/credit | 149,018 | 10,957 | 138,061 |
| b. Net (loss)/gain | $(8,171,576)$ | $(703,300)$ | $(7,468,276)$ |
| 3 Occurring during the year |  |  |  |
| a. Net prior service cost/(credit) | 0 | 0 | 0 |
| b. Net loss/(gain) | 53,890,320 | 3,707,753 | 50,182,567 |
| 4 Amounts recognized due to curtailment/settlement |  |  |  |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 0 | 0 | 0 |
| 5 AOCl at current fiscal year end | 233,662,143 | 18,648,805 | 215,013,338 |

Additional Disclosure Information
A Accumulated Benefit Obligation (ABO)
1 ABO at current fiscal year end

| $(503,220,792)$ | $(35,645,813)$ | $(467,574,979)$ |
| ---: | ---: | ---: |
|  |  |  |
| $45,263,928$ | $3,512,022$ | $41,751,906$ |
| $45,087,629$ | $3,438,829$ | $41,648,800$ |
| $44,275,510$ | $3,359,873$ | $40,915,637$ |
| $43,346,141$ | $3,277,441$ | $40,068,700$ |
| $42,577,003$ | $3,188,124$ | $39,388,879$ |
| $196,830,433$ | $14,235,404$ | $182,595,029$ |

C Expected Contributions during Fiscal Year ending December 31, 2023 1 Employer

| 1 Employer | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: |
| 2 Plan participants | 0 | 0 | 0 |
| anges in Disclosed Plan Obligations and Assets |  |  |  |
| Change in Projected Benefit Obligation (PBO) |  |  |  |
| 1 PBO at prior fiscal year end | 598,999,184 | 42,772,632 | 556,226,552 |
| 2 Employer service cost | 1,600,000 | 119,853 | 1,480,147 |
| 3 Interest cost | 17,324,027 | 1,232,075 | 16,091,952 |
| 4 Actuarial loss/(gain) | $(75,779,118)$ | $(4,889,427)$ | $(70,889,691)$ |
| 5 Plan participants' contributions | 0 | 0 | 0 |
| 6 Benefits paid from plan assets | $(45,270,752)$ | $(3,482,986)$ | $(41,787,766)$ |
| 7 Benefits paid from Company assets | 0 | 0 | 0 |
| 8 Transfers from (to) other plans | 7,766,972 | 0 | 7,766,972 |
| 9 Administrative expenses paid | $(1,419,521)$ | $(106,334)$ | $(1,313,187)$ |
| 10 Plan amendments | 0 | 0 | 0 |
| 11 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 12 Curtailments | 0 | 0 | 0 |
| 13 Settlements | 0 | 0 | 0 |
| 14 Special/contractual termination benefits | 0 | 0 | 0 |
| 15 PBO at current fiscal year end | 503,220,792 | 35,645,813 | 467,574,979 |

B Expected Future Benefit Payments

| 1 During fiscal year ending December 31, 2023 | $4,51,263,928$ | $41,751,906$ |  |
| :--- | ---: | ---: | ---: |
| 2 During fiscal year ending December 31, 2024 | 45,022 |  |  |
| 3 During fiscal year ending December 31, 2025 | $45,087,629$ | $4,438,829$ | $40,648,800$ |
| 4 During fiscal year ending December 31, 2026 | $44,275,510$ | $3,359,873$ | $40,915,637$ |
| 5 During fiscal year ending December 31, 2027 | $43,346,141$ | $3,277,441$ | $40,068,700$ |
| 6 During fiscal years ending December 31, 2028 through December 31, 2032 | $42,577,003$ | $3,188,124$ | $39,388,879$ |

Changes in Disclosed Plan Obligations and Assets
A Change in Projected Benefit Obligation (PBO)

B Change in Plan Assets

| 1 Fair value of plan assets at prior fiscal year end | $564,010,464$ | $37,860,500$ |
| :--- | :---: | :---: |
| 2 Actual return on plan assets | $(98,371,808)$ | $(6,515,232)$ |
| 3 Employer contributions | 0 | $(91,856,576)$ |
| 4 Plan participants' contributions | 0 | 0 |
| 5 Benefits paid | $(45,270,752)$ | 0 |
| 6 Transfer payments | $7,766,972$ | $(3,482,986)$ |
| 7 Administrative expenses paid | $(1,419,521)$ | $(41,787,766)$ |
| 8 Acquisitions/(divestitures) | 0 | $(106,334)$ |
| 9 Settlements | 0 | $(1,313,972$ |
| 10 Fair value of plan assets at current fiscal year end | $426,715,355$ | 0 |

## Reconciliation of Net Balances

A Reconciliation of Prior Service Cost/(Credit) Bases
1 Net amount at prior fiscal year end

| $(953,714)$ | $(70,122)$ | $(883,592)$ |
| ---: | ---: | ---: |
| 149,018 | 10,957 | 138,061 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| $(804,696)$ | $(59,165)$ | $(745,531)$ |

2 Amortization amount
3 Plan amendments
3 Plan amendments
4 Effect of curta
6 Net amount at current fiscal year en
B Reconciliation of Net Loss/(Gain)

| Reconciliation of Net Loss/(Gain) |  | 18, |
| :--- | ---: | ---: |
| 1 Net amount at prior fiscal year end | $188,748,095$ | $15,703,517$ |
| 2 Amount recognized | $(8,171,576)$ | $(703,000)$ |
| 3 Experience loss/(gain) | $53,890,320$ | $(7,468,276)$ |
| 4 Effect of curtailments | 0 | $50,182,567$ |
| 5 Effect of settlements | 0 | 0 |
| 6 Other events | 0 | 0 |
| 7 Net amount at current fiscal year end | $234,466,839$ | 0 |


| ALLETE, Inc. |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Plan C | Sotal | Superior Water, Light |  |  |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | Und | USD | USD |

## Development of Plan Assets for Benefit Cost

| A | Reconciliation of Fair Value of Plan Assets |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 Fair value of plan assets at 31-Dec-21 | 564,010,464 | 37,860,500 | 526,149,964 |
|  | 2 Actual return on plan assets | $(98,371,808)$ | $(6,515,232)$ | $(91,856,576)$ |
|  | 3 Employer contributions | 0 | 0 | 0 |
|  | 4 Plan participants' contributions | 0 | 0 | 0 |
|  | 5 Benefits paid | $(37,503,780)$ | $(3,482,986)$ | (34,020,794) |
|  | 6 Administrative expenses paid | $(1,419,521)$ | $(106,334)$ | $(1,313,187)$ |
|  | 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
|  | 8 Settlements | 0 | 0 | 0 |
|  | 9 Fair value of plan assets at 31-Dec-22 | 426,715,355 | 27,755,948 | 398,959,407 |
| B | Reconciliation of Market-Related Value of Plan Assets |  |  |  |
|  | 1 Market-related value of plan assets at 31-Dec-21 | 543,158,798 | 36,402,598 | 506,756,200 |
|  | 2 Actual return on plan assets | 7,822,929 | 493,860 | 7,329,069 |
|  | 3 Employer contributions | 0 | 0 | 0 |
|  | 4 Plan participants' contributions | 0 | 0 | 0 |
|  | 5 Benefits paid | $(37,503,780)$ | $(3,482,986)$ | (34,020,794) |
|  | 6 Administrative expenses paid | $(1,419,521)$ | $(106,334)$ | $(1,313,187)$ |
|  | 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
|  | 8 Settlements | 0 | 0 | 0 |
|  | 9 Market-related value of plan assets at 31-Dec-22 | 512,058,426 | 33,307,138 | 478,751,288 |
| C | Rate of Return on Invested Assets |  |  |  |
|  | 1 Weighted invested assets | 544,548,813 | 36,065,840 | 508,482,973 |
|  | 2 Rate of return | (18.065\%) | (18.065\%) | (18.065\%) |
| D | Investment Loss/(Gain) |  |  |  |
|  | 1 Actual return | $(98,371,808)$ | $(6,515,232)$ | (91,856,576) |
|  | 2 Expected return | 32,672,928 | 2,163,950 | 30,508,978 |
|  | 3 Loss/(gain) | 131,044,736 | 8,679,182 | 122,365,554 |
| E | Market-Related Value of Assets1 Fair value of plan assets at 31-Dec-222 Deferred investment (gains) and losses for the last 5 yearsa. Deferred amount from measurement year ending 31-Dec-22i. (Gain) / Lossii. Percent recognizediii. Percent deferrediv. Deferred amount |  |  |  |
|  |  | 426,715,355 | 27,755,948 | 398,959,407 |
|  |  |  |  |  |
|  |  | 131,044,736 | 8,679,182 | 122,365,554 |
|  |  | N/A | 20.000\% | 20.000\% |
|  |  | N/A | 80.000\% | 80.000\% |
|  |  | 104,835,789 | 6,943,346 | 97,892,443 |
|  | b. Deferred amount from measurement year ending 31-Dec-21i. (Gain) / Lossii. Percent recognizediii. Percent deferrediv. Deferred amount |  |  |  |
|  |  | 21,307,208 | 1,443,447 | 19,863,761 |
|  |  | N/A | 40.000\% | 40.000\% |
|  |  | N/A | 60.000\% | 60.000\% |
|  |  | 12,784,325 | 866,068 | 11,918,257 |
|  | c. Deferred amount from measurement year ending 31-Dec-20i. (Gain) / Lossii. Percent recognizediii. Percent deferrediv. Deferred amount | $(37,689,367)$ | $(2,599,768)$ | $(35,089,599)$ |
|  |  | N/A | 60.000\% | 60.000\% |
|  |  | N/A | 40.000\% | 40.000\% |
|  |  | $(15,075,747)$ | $(1,039,907)$ | $(14,035,840)$ |
|  | d. Deferred amount from measurement year ending 31-Dec-19i. (Gain) / Loss |  |  |  |
|  |  | $(65,412,251)$ | $(4,569,813)$ | (60,842,438) |
|  | ii. Percent recognized | N/A | 80.000\% | 80.000\% |
|  | iii. Percent deferred | N/A | 20.000\% | 20.000\% |
|  | iv. Deferred amount | $(13,082,451)$ | $(913,963)$ | $(12,168,488)$ |
|  | e. Deferred amount from measurement year ending 31-Dec-18i. (Gain) / Loss |  |  |  |
|  |  | 54,405,433 | 3,875,628 | 50,529,805 |
|  | ii. Percent recognized | N/A | 100.000\% | 100.000\% |
|  | iii. Percent deferred | N/A | 0.000\% | 0.000\% |
|  | iv. Deferred amount | 0 | 0 | 0 |
|  | f. Total deferred amount | 89,461,916 | 5,855,544 | 83,606,372 |
|  | 3 Market-related value of assets | 512,058,426 | 33,307,138 | 478,751,288 |


| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Plan C | Total | Superior Water, Light and Power | Minnesota Power |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Summary and Comparison of Benefit Cost and Cash Flows | 31-Dec-23 | 31-Dec-23 | 31-Dec-23 |
| A Total Benefit Cost |  |  |  |
| 1 Employer service cost | 1,600,000 | 119,853 | 1,480,147 |
| 2 Interest cost | 27,345,505 | 1,928,330 | 25,417,175 |
| 3 Expected return on plan assets | $(31,812,720)$ | $(2,050,823)$ | $(29,761,897)$ |
| 4 Subtotal | $(2,867,215)$ | $(2,640)$ | $(2,864,575)$ |
| 5 Net prior service cost/(credit) amortization | $(149,018)$ | $(10,957)$ | $(138,061)$ |
| 6 Net loss/(gain) amortization | 5,522,299 | 576,133 | 4,946,166 |
| 7 Subtotal | 5,373,281 | 565,176 | 4,808,105 |
| 8 Net periodic benefit cost/(income) | 2,506,066 | 562,536 | 1,943,530 |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Total benefit cost | 2,506,066 | 562,536 | 1,943,530 |
| B Assumptions |  |  |  |
| 1 Discount rate | 5.690\% | 5.690\% | 5.690\% |
| 2 Expected long-term rate of return on plan assets | 6.500\% | 6.500\% | 6.500\% |
| 3 Rate of compensation increase | 0.000\% | 0.000\% | 0.000\% |
| 4 Pension increases for in-payment benefits | 2.500\% | 2.500\% | 2.500\% |
| 5 Pension increases for deferred benefits | 0.000\% | 0.000\% | 0.000\% |
| 6 Census date | N/A | 1-Jan-22 | 1-Jan-22 |
| C Plan Assets at Beginning of Year |  |  |  |
| 1 Fair value | 426,715,355 | 27,755,948 | 398,959,407 |
| 2 Market-related value | 512,058,426 | 33,307,138 | 478,751,288 |
| D Expected Cash Flows |  |  |  |
| 1 Employer contributions | 0 | 0 | 0 |
| 2 Plan participants' contributions | 0 | 0 | 0 |
| 3 Benefits paid from Company assets | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 45,263,928 | 3,512,022 | 41,751,906 |
| E Amortization Period | N/A | 16.64927 | 17.81013 |
| Participant Information - Census Date | N/A | 1-Jan-22 | 1-Jan-22 |
| A Participating Employees |  |  |  |
| 1 Number | 187 | 11 | 176 |
| 2 Average annual compensation/salary | N/A |  |  |
| 3 Average age | 53.03 |  |  |
| 4 Average credited service | 10.27 |  |  |
| B Participants with Deferred Benefits |  |  |  |
| 1 Number | 87 | 2 | 85 |
| 2 Average annual deferred benefits | 4,644 |  |  |
| 3 Average age | 54.39 |  |  |
| C Participants Receiving Benefits |  |  |  |
| 1 Number | 1,635 | 130 | 1,505 |
| 2 Average annual benefit payments | 27,600 |  |  |
| 3 Average age | 73.96 |  |  |
| D Other Participants |  |  |  |
| 1 Number | 0 | 0 | 0 |
| 2 Average annual benefit payments | N/A |  |  |
| 3 Average age | N/A |  |  |
| Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| Amortization Details of Plan Amendment \#1 |  |  |  |
| 1 Net amount at 31-Dec-21 | N/A | $(70,122)$ | $(883,592)$ |
| 2 Amortization amount during 2022 | N/A | 10,957 | 138,061 |
| 3 Effect of curtailments | N/A | 0 | 0 |
| 4 Other events | N/A | 0 | 0 |
| 5 Net amount at 31-Dec-22 | N/A | $(59,165)$ | $(745,531)$ |
| 6 Remaining amortization period | N/A | 5.40000 | 5.40000 |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| A Reconciliation of Amounts Recognized in Statement of Financial Position |  |  |  |
| 1 Projected Benefit Obligation (PBO) | (503,220,792) | ( $35,645,813$ ) | $(467,574,979)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 426,715,355 | 27,755,948 | 398,959,407 |
| 3 Net balance sheet asset/(liability) | $(76,505,437)$ | $(7,889,865)$ | $(68,615,572)$ |
| 4 Net prior service cost/(credit) | $(804,696)$ | $(59,165)$ | $(745,531)$ |
| $5 \mathrm{Net} \mathrm{loss/(gain)}$ | 234,466,839 | 18,707,970 | 215,758,869 |
| 6 Accumulated Employer contributions in excess of net periodic benefit cost | 157,156,706 | 10,758,940 | 146,397,766 |
| B Accumulated Employer Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| 1 Amount as of beginning of year | 152,805,661 | 10,721,263 | 142,084,398 |
| 2 Net periodic postretirement benefit (cost)/income | 4,351,045 | 37,677 | 4,313,368 |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 0 | 0 | 0 |
| 5 Benefits paid from Company assets | 0 | 0 | 0 |
| 6 Other recognized loss/(gain) | 0 | 0 | 0 |
| 7 Other adjustments | 0 | 0 | 0 |
| 8 Amount as of end of year | 157,156,706 | 10,758,940 | 146,397,766 |

## Statement of actuarial assumptions, methods and data sources

Plan Sponsor

ALLETE, Inc.

## Statement of Assumptions

The assumptions disclosed in this Appendix are for the fiscal year ending December 31, 2022 financial reporting and the fiscal year 2023 benefit cost.

Assumptions and methods for pension cost purposes

## Actuarial Assumptions and Methods - Pension Cost

| Economic Assumptions |  |
| :--- | ---: |
| Pre-tax rate of return on assets | $7.00 \%$ |
| Discount rate - Used for disclosure as of 12/31/2021: | $3.16 \%$ |
| Discount rate - Used for re-measurement as of 1/31/2022: | $3.43 \%$ |
| Discount rate - for FYE22 disclosure and FY23 benefit cost | $5.71 \%$ |
| Annual rates of increase |  |
| $\square$ Consumer Price Index |  |
| -2022 | $9.10 \%$ |
| -2023 | $4.00 \%$ |

- Compensation
- Representative rates

| Attained <br> Service | Percentage <br> Increase |
| :---: | :---: |
| 0 | $4.90 \%$ |
| 1 | $4.50 \%$ |
| 6 | $4.00 \%$ |
| 11 | $3.70 \%$ |
| 16 | $3.40 \%$ |
| 21 | $3.40 \%$ |
| 26 | $3.20 \%$ |
| 31 | $3.00 \%$ |
| $36+$ | $2.75 \%$ |

As required by the U.S. GAAP accounting standard, the discount rate based on high quality corporate bonds (AA and AAA) is used to determine the obligations and service cost, and thus the net periodic benefit cost for the plan. Because these assumptions are required by the U.S. GAAP accounting standard, and reflect current market conditions (specifically, the market conditions as of the measurement date) they may from time to time be inconsistent with other economic assumptions used in the valuation, which may reflect both current economic conditions and assumed future conditions.

The return on assets shown above is net of investment expenses. Administrative expenses are accounted for as an addition to Service Cost, as described below.

## Demographic Assumptions

## Mortality:

- Healthy mortality rates

Base Mortality Table [Male Table used for males; Female Table used for Females]

1. Base table: Pri-2012
2. Base mortality table year: 2012
3. Table type: Non-Union: No Collar, Union: Blue Collar
4. Healthy or Disabled: Healthy
5. Table weighting: Benefit
6. Blending of annuitants and non-annuitants: Separate rates for annuitants and non-annuitants (based on Employees table)
7. Blending of retirees and contingent annuitants: Separate rates for retirees/contingent annuitants and contingent survivors

Mortality Improvement Scale

1. Base scale: MP-2021
2. Projection Type: Generational

Rates at which participants are assumed to terminate by age are shown below.

| Percentage assumed to leave during the year <br> (Representative Rates) |  |
| :---: | :---: |
| Attained Age | Percentage |
| 20 | $10.40 \%$ |
| 25 | $7.20 \%$ |
| 30 | $3.05 \%$ |
| 35 | $6.5 \%$ |
| 40 | $5.8 \%$ |
| 45 | $5.1 \%$ |
| 50 | $4.5 \%$ |
| $55+$ | $3.9 \%$ |

## Retirement

Rates at which participants are assumed to retire by age are shown below.

Percentage assumed to retire during the year

| Age | Percentage |
| :---: | :---: |
| $50-54$ | $4.0 \%$ |
| $55-56$ | $8.0 \%$ |
| 57 | $9.0 \%$ |
| $58-59$ | $14.0 \%$ |
| 60 | $25.0 \%$ |
| 61 | $40.0 \%$ |
| 62 | $65.0 \%$ |
| 63 | $55.0 \%$ |
| 64 | $40.0 \%$ |
| 65 | $85.0 \%$ |
| $66-67$ | $50.0 \%$ |
| $68+$ | 100.00 |

## Additional Assumptions

Administrative expenses $\$ 500,000$ added to current year normal cost

## Cash flow

- Timing of benefit payments

Benefit payments are assumed to be made uniformly throughout the year and, on average, at mid-year.

- Amount and timing of contributions


## Funding policy

## Inclusion date

Contributions are generally assumed to be made on the last day required to meet quarterly and minimum funding requirements. For FY2023, a contribution of $\$ 6.45 \mathrm{M}$ is expected on January 17, 2023.

ALLETE's current funding policy is to contribute the minimum required contribution, or the amount required to avoid benefit restrictions, if greater.

The valuation date coincident with or next following the date on which the employee becomes a participant.

It is assumed there will be no additional new or rehired employees.

## Benefit commencement dates

- Preretirement death benefit The later of the death of the active participant or the date the participant would have attained age 65
- Deferred vested benefit

Age 62

- Retirement benefit Upon termination of employment


## Form of payment

## Percent married

Spouse age

Covered pay

Decrement timing

| Form of Payment | Lump Sum | Single Life | $\mathbf{5 0 \%}$ J\&S |
| :--- | :---: | :---: | :---: |
| Active Retirements | $0 \%$ | $15 \%$ | $85 \%$ |
| Future Vested Deferred | $0 \%$ | $15 \%$ | $85 \%$ |
| Future Deaths | $0 \%$ | $100 \%$ | $0 \%$ |
| Current Vested | $0 \%$ | $15 \%$ | $85 \%$ |
| Deferred |  |  |  |

$85 \%$ of males; $65 \%$ of females. These assumptions are used to value pre-retirement surviving spouse benefits and in determining the optional form expected to be elected at commencement.

Male participants: Spouse 2 years younger
Female participants: Spouse 3 years older

Covered pay is defined as straight time pay including results sharing and excluding overtime and bonuses.

The assumptions used are collectively called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year.

## Methods - Pension Cost and Funded Position

## Census date

## Measurement date

January 1, 2022

December 31, 2022

The benefit obligations are based on census data collected as of January 1, 2022. We have projected the benefit obligations forward to December 31, 2022, adjusting for benefit payments, expected growth in the benefit obligations, changes in key assumptions and plan provisions, and any significant changes in the plan population.

The Projected Unit Credit Cost Method is used to determine the PBO and the related current service cost. Under this method, a "projected accrued benefit" is calculated based upon service as of the measurement date and projected future compensation and social security levels at the age at which the employee is assumed to leave active service. The PBO is the present value of this benefit and the service cost is the present value of the increase in the benefit due to service in the upcoming year. In normal circumstances the "projected accrued benefit" is based on the plan's accrual formula. However, if service in later years leads to a materially higher level of benefit than in earlier years, the "projected accrued benefit" is calculated by attributing projected benefits on a straight-line basis over the relevant period.

## Market-related value of assets

The benefits described above are used to determine both ABO and PBO except that final average pay is assumed to remain constant in the future when calculating ABO.

PBO is measured by determining a portfolio of bonds, using the December 31, 2022 Willis Towers Watson BOND:Link model, that will provide the cash flows necessary to satisfy the projected benefit payments underlying the PBO determined using the methodology described above, and determining the market value of that portfolio. A single discount rate that will equate the present value of those benefit payments to the market value of the bond portfolio is determined. Service cost is determined by discounting the projected benefit payments underlying service cost, determined using the methodology described above, by the same discount rate determined above for the PBO. Interest cost is measured by applying the discount rate to the PBO.

For the market-related value of assets, a smoothed actuarial value of assets is used, equal to a moving average market values in which investment income is recognized over a five-year period. Investment income qual to the expected return on plan assets as calculated for the prior year's expense is recognized immediately. Any difference between the actual investment income (on a market value basis) and the expected return is recognized over a five-year period ( $20 \%$ in the first year, $40 \%$ in the second year, and so on, until the full $100 \%$ is recognized in the fifth year). In addition, the market-related value of assets must be no greater than $120 \%$ and no less than $80 \%$ of the market value of assets.

## Amortization of unamortized amounts:

## - Recognition of past service cost/(credit)

## - Recognition of gains or losses

Amortization of net prior service cost/(credit) resulting from a plan change is included as a component of Net Periodic Benefit Cost/(Income) in the year first recognized and every year thereafter until it is fully amortized. The annual amortization payment is determined in the first year as the increase in PBO due to the plan change divided by the average remaining service period of active participants expected to receive benefits under the plan.

However, when a plan change reduces the PBO, existing positive prior service costs are reduced or eliminated starting with the earliest established before a new prior service credit base is established.

Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in market-related value) is included as a component of Net Periodic Benefit Cost/(Income) for a year.

If, as of the beginning of the year, that net gain or loss exceeds 10\% of the greater of the PBO and the market-related value of plan assets, the amortization is that excess divided by the average remaining service period of active plan participants.

Under this methodology, the gain/loss amounts recognized in AOCl are not expected to be fully recognized in benefit cost until the plan is terminated (or an earlier event, like a settlement, triggers recognition) because the average expected remaining service of active participants expected to benefit under the plan over which the amounts are amortized is redetermined each year and amounts that fall within the corridor described above are not amortized.

## Benefits not valued

None

## Sources of Data and Other Information

The plan sponsor furnished participant data as of $1 / 1 / 2022$. Information on assets, contributions and plan provisions was supplied by the plan sponsor. Data and other information were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available, and the data was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for deferred taxes. Any deferred tax effects in AOCI should be determined in consultation with ALLETE's tax advisors and auditors. Willis Towers Watson used information supplied by ALLETE regarding the postretirement benefit asset, postretirement benefit liability, and amounts recognized in accumulated other comprehensive income as of the end of the 2022 fiscal year.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

## Assumptions Rationale - Significant Economic Assumptions

Please see the letter delivered January 2023 for additional details.

## Assumptions Rationale - Significant Demographic Assumptions

Please see the letter delivered January 2023 for additional details.

## Source of Prescribed Methods (Required for ASOP compliance, otherwise optional)

## Accounting methods

The methods used for accounting purposes as described in Appendix A, including the method of determining the market-related value of plan assets, are "prescribed methods set by another party", as defined in the actuarial standards of practice (ASOPs). As required by U.S. GAAP, these methods were selected by the plan sponsor.

## Changes in Assumptions, Methods and Estimation Techniques

## Change in assumptions since prior valuation

- The discount rate was changed from $3.16 \%$ to $5.71 \%$.
- The consumer price index assumption was increased from 2.00\% to $9.10 \%$ in $2022,4.00 \%$ in 2023, and $2.50 \%$ thereafter.
- The long-term rate of return assumption was changed from 6.00\% to $7.00 \%$.

None.
Change in methods since prior valuation

Change in estimation None. techniques since prior valuation

## Model Descriptions and Disclosures in accordance with ASOP No. 56

## Quantify

Quantify is the Willis Towers Watson centrally developed, tested and
maintained Global actuarial valuation system. It is used to perform valuations of clients' benefit plans.

Quantify provides the ability to process data, calculate benefits and value benefit liabilities, develop results using applicable standards, and generate client reports.

Quantify parameters provide significant flexibility to model populations and plan designs. Various demographic, economic and benefit related assumptions exist for users to model multiple demographic and economic situations.

Plan liabilities are calculated based on standard actuarial techniques, developing actuarially reasonable results using the population and parameters entered. The calculation and presentation of liabilities in Quantify relies on the assumptions used and the reasonability of the assumptions selected.

Quantify incorporates standard liability methodologies that are intended to reasonably reflect a variety of economic or demographic conditions. The model itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence.

Quantify is designed specifically for these purposes, and we know of no material limitations that would prevent the system from being suitable for these intended purposes. The actuaries signing this report have relied on the actuaries who develop, test and maintain this system, and have also performed a limited review of results to ensure that system parameters have been set appropriately and plan provisions coded correctly.

## Quantify FR

## RATE: Link

BOND:Link

Quantify Financial Reporting (FR) is intended to calculate funding results, accounting results and produce the associated client reports under selected accounting standards. The calculations and reports are based on various user specified inputs including liability results and asset values.

Quantify FR develops valuation results for various accounting and funding purposes using standard actuarial techniques.

Calculation of disclosure liabilities and results are based on roll forward liabilities.

Liability roll-forwards are used in accounting scenarios where the date as of which liabilities are valued does not coincide with the fiscal year measurement date. The roll-forwards consist of adjusting liabilities for the passage of time.

The estimate of the following year's expense is calculated based on the obligations and assets used for disclosure and incorporates service cost that may be based on a projection in the associated Quantify liability run, depending on the relationship of the liability valuation date to the fiscal year.

The Roll Forward accounting calculations assume that applicable rules will not change during the roll-forward period. Actuaries make adjustments to the data, plan provisions and assumptions reflected in the calculation of the liabilities that are rolled forward so that the results reflect conditions at the measurement date, and/or make similar adjustments to the results of the roll forward, including reflecting any changes in applicable accounting standards.

RATE: Link is a methodology to develop spot rates to be used for liability and cost measurements related to employee benefit plans. The same core methodology is used to develop all RATE: Link curves. The RATE: Link process develops term structures of interest rates from corporate bond data for each covered geography (e.g., the U.S. for this valuation).

The construction of RATE: Link yield curves relies on bond data collected as of the measurement date.

Information regarding quoted bond prices, yields and other bond related data is from Bloomberg Finance L.P.
U.S. BOND:Link is a methodology to assist with the selection of discount rates used in liability and cost measurements related to employee benefit plans. Discount rates are derived by identifying a theoretical settlement portfolio of high-quality corporate bonds sufficient to provide for a plan's projected benefit payments. The single interest rate is then determined that results in a discounted value of the plan's benefit payments that equals the market value of the selected bond portfolio.

Updated BOND:Link models are developed monthly as of the last day of the month. The construction of a BOND:Link model relies on bond data collected as of the measurement date. Parameters provide the

## Expected Return Estimator

user the ability to control aspects of the model. The model output allows the user to see the effects of those parameters.

Information regarding quoted bond prices, yields and other bond related data is from Bloomberg Finance L.P.

The Expected Return Estimator is used to help inform the choice of an expected return assumption (e.g., as one data point to consider) for returns on the assets of the trust.

The tool depends on the capital market assumptions chosen at the starting date of the simulation. These assumptions reflect currently prevailing capital market conditions, assumed future conditions ("normative conditions"), and the transition from the current conditions to the normative ones.

The assumed normative conditions incorporate a blend of historical capital market data and future expectations. The sources consulted in the determination of normative levels include practitioners in our global actuarial and investment consulting practices, plan sponsors, investment managers, economists, and academics.

Swift is intended to develop projections of plan (pension and OPRB plans) and/or asset values based on various user specified inputs. These amounts are then used to develop contribution and cost results under selected accounting standards and funding regulations. The time horizon for the analysis is 10 full future years.

The parameters provide a great deal of flexibility to model populations and plan designs. Various demographic and economic assumptions exist for users to model multiple demographic and economic scenarios. The Swift model for liabilities is a simplified alternative to using a full valuation system to develop projections of plan liabilities. The assumptions used to control the projected asset values are intended to be flexible enough to model a variety of scenarios reflecting the investment mix of the plan modeled.

Plan liabilities are initially projected based on standard actuarial techniques for a roll-forward based on the population/design parameters entered. The liabilities are then adjusted with inputs providing their sensitivity to various economic experience and valuation assumptions.

Assets are projected on a monthly basis reflecting the data, calculated cash flows, and input assumptions.

The model itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence.

Funding and accounting calculations assume that applicable rules will not change during the forecast horizon.

Certain details are not reflected in the model. For example, special events (curtailments, settlements, termination benefits) are not included in the standard accounting calculations. Additionally, the

RPEC Model Implementation Tools
model does not support interim re-measurements of benefit cost. Actuaries make adjustments to the data, plan provisions and assumptions reflected in the calculation of the liabilities that are projected forward so that the results reflect conditions at the measurement date, and/or make similar adjustments to the results of the projection, including reflecting any changes in applicable accounting standards.

The MIM-2021 Model Implementation Tools are used to construct a mortality improvement scale is intended to produce future mortality improvement rates by age, year and gender based on historical mortality experience data, certain model inputs and a graduation algorithm to create a smooth transition from historical rates to projected rates. The Retirement Plans Experience Committee of the Society of Actuaries (RPEC) collects the data, defines the input parameters, develops and maintains the model. The RPEC annually publishes an update to this model for use by actuaries, and we have relied on the 2021 version of this model.

The input parameters that can be used as published or modified by the user include: long-term improvement rate, horizontal (by age) convergence period, diagonal (by year of birth) convergence period, convergence blending percentages and initial slope constraint.

## Summary of principal pension plan provisions

## Plan Provisions

The most recent amendment reflected in the following plan provisions was adopted on February 1, 2022

## Covered employees

## Participation date

All union employees hired before February 1, 2011 and all union SWL\&P employees. Effective February 1, 2022, no employee hired or rehired on or after February 1, 2022 shall be eligible to accrue benefits in the plan.

Age 18 and over than have 1,000 or more hours of service in a plan year

## Definitions

## Continuous service

## Pensionable earnings

## Final average earnings

## Eligible spouse

Transferred employees

The period of continuous employment as a regular employee of the company including service as an employee of any predecessor company. Periods on disability where LTD benefits are being received are included.

Pensionable earnings is defined as straight time pay including results sharing excluding overtime and bonuses.

Highest average compensation received for 48 consecutive months during the 15 years of service immediately preceding retirement or termination. Compensation is limited as required under Internal Revenue Code Section 401(a)(17).

The person who was married to an employee for at least one year immediately prior to the employee's retirement date.

For employees who transfer between Plan C (formerly Plan A) and Plan B, the accrued benefit to the date of transfer remains payable from the former plan. The former accrued benefit is adjusted for pay at the date of termination versus pay at the date of transfer. The adjustment is payable from the new plan.

## Eligibility for Benefits

## Normal retirement

Early retirement
Postponed retirement

Age 65 with five years of service
Age 50 with ten years of service
Retirement after NRD

| Deferred vested termination | Five years of service |
| :--- | :--- |
| Disability | Five years of service |
| Preretirement death benefit | Five years of service |

## Benefits Paid Upon the Following Events

Normal retirement
Early retirement - Minnesota
Power

Early retirement - SWL\&P

Postponed retirement

## Deferred vested termination

Disability Retirement

Greater of:
1.6\% of final average earnings for each year of service (for participants of the plan effective February 1, 2001).
or

5\% of final average earnings plus 1.35\% of final average earnings for each year of service (for participants of the plan prior to February 1, 2001).

Normal retirement benefit reduced by 4.00\% for each year between the early retirement date and age 62 (prorated for partial ages). Benefits are unreduced at age 58 with 40 or more years of service.

Normal retirement benefit reduced by $2.00 \%$ for each of the first 3 years, $2.75 \%$ for the next 2 years, and $4.00 \%$ for the remaining years between the early retirement date and 62 (prorated for partial ages). Benefits are unreduced at age 58 with 40 or more years of service.

Active participants: The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.

The proportionate part (based on service to termination divided by expected service at age 65) of the benefit expected at age 65, available as a deferred annuity.

Participants with at least 10 years of vesting service upon termination are eligible for early retirement described above.

Participants with at least 5 years of vesting service but less than 10 years of vesting service upon termination cannot receive until age 65.

Same as normal retirement, assuming compensation continues prior to commencement at the rate in effect immediately before the participant became totally disabled. Service continues to accrue during the participant's period of disability.

## Preretirement death

Upon the death of an active participant, a monthly benefit equal to the larger of (a), (b), or (c) is payable for life:
(a) $25 \%$ of current compensation.
(b) 50\% of compensation less Social Security benefits.
(c) A monthly benefit equal to 50\% of the benefit the employee could have received if he had terminated on the date of death and began receiving payments on his earliest retirement date.

Benefits (a) and (b) are not subject to the cost-of-living adjustment and are subject to certain flat dollar maximums. Benefit (c) is subject to the cost-of-living adjustment.

## Other Plan Provisions

## Forms of payment

Automatic form for unmarried participants: the normal form is a life annuity.

Automatic form for married participants: for an employee with an eligible spouse (who elected out of the 1970 contributory life insurance program), the normal form is a $50 \%$ joint and survivor annuity.

Optional forms: life annuity; 50\%, 75\% and 100\% contingent beneficiary annuities; 50\% joint and survivor annuity; 10-year certain and life annuity; and social security level income annuity.

## Cost -of-Living Adjustment

Maximum limits on benefits and pay
$50 \%$ of the benefit at retirement is subject to adjustment on each May 1 and November 1. The adjustment is equal to the percentage change in the Consumer Price Index. Maximum increase equals 3\% times the number of adjustment dates since retirement. Benefit cannot decrease below initially determined amount.

Compensation for any 12-month period used to determine accrued benefits may not exceed the limits in IRC Section 401(a)(17) for the calendar year in which the 12-month period begins. This limit is indexed annually.

Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually.

## Future Plan Changes

None

## Changes in Benefits Valued Since Prior Year

The SWL\&P early retirement factors were updated from $4.000 \%$ for each year between the early retirement date and age 62 to $2.00 \%$ for each of the first 3 years, $2.75 \%$ for the next 2 years, and $4.00 \%$ for the remaining years between the early retirement date and age 62 . This change was reflected at the January 31, 2022 re-measurement.

## Statement of actuarial assumptions, methods and data sources

Plan Sponsor

ALLETE, Inc.

## Statement of Assumptions

The assumptions disclosed in this Appendix are for the fiscal year ending December 31, 2021 financial reporting and the fiscal year 2022 benefit cost.

## Assumptions and methods for pension cost purposes

## Actuarial Assumptions and Methods - Pension Cost

## Economic Assumptions

## Pre-tax rate of return on assets

6.50\%

Discount rate - Used for disclosure as of 12/31/2021 3.00\%
Discount rate - Used for disclosure as of 12/31/2022
5.69\%

## Annual rates of increase

- Consumer Price Index $\quad 2.00 \%$
- 2022
9.10\%
- 2023 4.00\%
- 2024 2.50\%

As required by the U.S. GAAP accounting standard, the discount rate based on high quality corporate bonds (AA and AAA) is used to determine the obligations and service cost, and thus the net periodic benefit cost for the plan. Because these assumptions are required by the U.S. GAAP accounting standard, and reflect current market conditions (specifically, the market conditions as of the measurement date) they may from time to time be inconsistent with other economic assumptions used in the valuation, which may reflect both current economic conditions and assumed future conditions.

The return on assets shown above is net of investment expenses. Administrative expenses are accounted for as an addition to Service Cost, as described below.

## Demographic Assumptions

## Mortality:

- Healthy mortality rates


## Termination (not due to disability or retirement) rates

Base Mortality Table [Male Table used for males; Female Table used for Females]

1. Base table: Pri-2012
2. Base mortality table year: 2012
3. Table type: Non-Union: No Collar, Union: Blue Collar
4. Healthy or Disabled: Healthy
5. Table weighting: Benefit
6. Blending of annuitants and non-annuitants: Separate rates for annuitants and non-annuitants (based on Employees table)
7. Blending of retirees and contingent annuitants: Separate rates for retirees/contingent annuitants and contingent survivors

Mortality Improvement Scale

1. Base scale: MP-2021
2. Projection Type: Generational

The rates at which participants are assumed to terminate employment by age are shown below:

| Percentage assumed to leave during the year <br> (Representative Rates) |  |
| :---: | :---: |
| Attained Age | Percentage |
| 20 | $10.40 \%$ |
| 25 | $7.20 \%$ |
| 30 | $4.88 \%$ |
| 35 | $2.18 \%$ |
| 40 | $1.73 \%$ |
| 45 | $1.53 \%$ |
| 50 | $1.40 \%$ |
| $55+$ | $3.90 \%$ |


| Retirement | Rates at which participants are assumed to retire by age are shown below. |
| :---: | :---: |
|  | Percentage assumed to retire during the year |
|  | Age Percentage |
|  | 50-54 3.0\% |
|  | 55-56 10.0\% |
|  | 57-59 20.0\% |
|  | 60-61 33.0\% |
|  | 62 50.0\% |
|  | 63-64 40.0\% |
|  | 65 65.0\% |
|  | 66-67 35.0\% |
|  | $68+$ l $100.0 \%$ |
| Additional Assumptions |  |
| Administrative expenses | \$1,600,000 added to current year normal cost. |
| Cash flow |  |
| - Timing of benefit payments | Benefit payments are assumed to be made uniformly throughout the year and, on average, at mid-year. |
| - Amount and timing of contributions | Contributions are generally assumed to be made on the last day required to meet quarterly and minimum funding requirements. For FY2023, no contributions are expected. |
| Funding policy | ALLETE's current funding policy is to contribute the minimum required contribution, or the amount required to avoid benefit restrictions, if greater. |
| Inclusion date | The valuation date coincident with or next following the date on which the employee becomes a participant. |
| New or rehired employees | It was assumed there will be no new or rehired employees. |

## Benefit commencement dates

- Preretirement death benefit
- Deferred vested benefit
- Retirement benefit

Form of payment - Male

Form of payment - Female

The later of the death of the active participant or the date the participant would have attained age 65

Age 61
Upon termination of employment

| Form of payment | Lump <br> sum | Single life | $\mathbf{6 0 \%}$ <br> J\&S | $\mathbf{5 0 \%}$ <br> J\&S |
| :--- | :---: | :---: | :---: | :---: |
| Active retirements | $0 \%$ | $15 \%$ | $85 \%$ | $0 \%$ |
| Future vested deferred | $0 \%$ | $15 \%$ | $85 \%$ | $0 \%$ |
| Future deaths | $0 \%$ | $100 \%$ | $0 \%$ | $0 \%$ |
| Current vested deferred <br> (former Plan A) | $0 \%$ | $15 \%$ | $85 \%$ | $0 \%$ |
| Current vested deferred <br> (former Plan B) | $0 \%$ | $15 \%$ | $0 \%$ | $85 \%$ |


| Form of payment | Lump <br> sum | Single life | $\mathbf{6 0 \%}$ <br> J\&S | $\mathbf{5 0 \%}$ <br> J\&S |
| :--- | :---: | :---: | :---: | :---: |
| Active retirements | $0 \%$ | $35 \%$ | $65 \%$ | $0 \%$ |
| Future vested deferred | $0 \%$ | $35 \%$ | $65 \%$ | $0 \%$ |
| Future deaths | $0 \%$ | $100 \%$ | $0 \%$ | $0 \%$ |
| Current vested deferred <br> (former Plan A) | $0 \%$ | $35 \%$ | $65 \%$ | $0 \%$ |
| Current vested deferred <br> (former Plan B) | $0 \%$ | $35 \%$ | $0 \%$ | $65 \%$ |

$85 \%$ of males; $65 \%$ of females. These assumptions are used to value pre-retirement surviving spouse benefits and in determining the coverage level expected to be elected at commencement.

Male participants: Spouse 2 years younger

Female participants: Spouse 3 years older

The assumptions used are collectively called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year.

## Methods - Pension Cost and Funded Position

## Census date

Measurement date

January 1, 2022
December 31, 2022
The benefit obligations are based on census data collected as of January 1, 2022. We have projected the benefit obligations forward to December 31, 2022, adjusting for benefit payments, expected growth in the benefit obligations, changes in key assumptions, and plan provisions, and any significant changes in the plan population.

The Projected Unit Credit Cost Method is used to determine the PBO and the related current service cost. Under this method, a "projected accrued benefit" is calculated based upon service as of the measurement date and projected future compensation and social security levels at the age at which the employee is assumed to leave active service. The PBO is the present value of this benefit and the service cost is the present value of the increase in the benefit due to service in the upcoming year. In normal circumstances the "projected accrued benefit" is based on the plan's accrual formula. However, if service in later years leads to a materially higher level of benefit than in earlier years, the "projected accrued benefit" is calculated by attributing projected benefits on a straight-line basis over the relevant period.

The benefits described above are used to determine both ABO and PBO.

PBO is measured by determining a portfolio of bonds, using the December 31, 2022 Willis Towers Watson BOND:Link model, that will provide the cash flows necessary to satisfy the projected benefit payments underlying the PBO determined using the methodology described above, and determining the market value of that portfolio. A single discount rate that will equate the present value of those benefit payments to the market value of the bond portfolio is determined. Interest cost is measured by applying the discount rate to the PBO.

Market-related value of assets
For the market-related value of assets, a smoothed actuarial value of assets is used, equal to a moving average market values in which investment income is recognized over a five-year period. Investment income qual to the expected return on plan assets as calculated for the prior year's expense is recognized immediately. Any difference between the actual investment income (on a market value basis) and the expected return is recognized over a five-year period ( $20 \%$ in the first year, $40 \%$ in the second year, and so on, until the full $100 \%$ is recognized in the fifth year). in addition, the market-related value of assets must be no greater than $120 \%$ and no less than $80 \%$ of the market value of assets.

## Amortization of unamortized

 amounts:- Recognition of past service cost/(credit)


## - Recognition of gains or losses

Amortization of net prior service cost/(credit) resulting from a plan change is included as a component of Net Periodic Benefit Cost/(Income) in the year first recognized and every year thereafter until it is fully amortized. The annual amortization payment is determined in the first year as the increase in PBO due to the plan change divided by the average remaining service period of active participants expected to receive benefits under the plan.

However, when a plan change reduces the PBO, existing positive prior service costs are reduced or eliminated starting with the earliest established before a new prior service credit base is established.

Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in marketrelated value) is included as a component of Net Periodic Benefit Cost/(Income) for a year.

If, as of the beginning of the year, that net gain or loss exceeds $10 \%$ of the greater of the PBO and the market-related value of plan assets, the amortization is that excess divided by the average remaining lifetime of plan participants.

Under this methodology, the gain/loss amounts recognized in AOCl are not expected to be fully recognized in benefit cost until the plan is terminated (or an earlier event, like a settlement, triggers recognition) because the average expected remaining lifetime of participants expected to benefit under the plan over which the amounts are amortized is redetermined each year and amounts that fall within the corridor described above are not amortized.

Benefits not valued

None.

## Sources of Data and Other Information

The plan sponsor furnished participant data as of 1/1/2022. Information on assets, contributions and plan provisions was supplied by the plan sponsor. Data and other information were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available, and the data was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for deferred taxes. Any deferred tax effects in AOCI should be determined in consultation with ALLETE's tax advisors and auditors. Willis Towers Watson used information supplied by ALLETE regarding the postretirement benefit asset, postretirement benefit liability, and amounts recognized in accumulated other comprehensive income as of the end of the 2021 fiscal year.
We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

## Assumptions Rationale - Significant Economic Assumptions

Please see the letter delivered January 2023 for additional details.
Assumptions Rationale - Significant Demographic Assumptions

Please see the letter delivered January 2023 for additional details.

## Source of Prescribed Methods (Required for ASOP compliance, otherwise optional)

Accounting methods The methods used for accounting purposes as described in Appendix A, including the method of determining the marketrelated value of plan assets, are "prescribed methods set by another party", as defined in the actuarial standards of practice (ASOPs). As required by U.S. GAAP, these methods were selected by the plan sponsor.

Changes in Assumptions, Methods and Estimation Techniques

Change in assumptions since prior valuation

The discount rate was changed from $3.00 \%$ to $5.69 \%$.

- The consumer price index assumption was increased from $2.00 \%$ to $9.10 \%$ in 2022, $4.00 \%$ in 2023, and $2.50 \%$ thereafter
- The long-term rate of return assumption was changed from $6.00 \%$ to $6.50 \%$.

None.
Change in methods since prior valuation

Change in estimation
None. techniques since prior valuation

## Model Descriptions and Disclosures in accordance with ASOP No. 56

Quantify

Quantify FR

Quantify is the Willis Towers Watson centrally developed, tested and maintained Global actuarial valuation system. It is used to perform valuations of clients' benefit plans.

Quantify provides the ability to process data, calculate benefits and value benefit liabilities, develop results using applicable standards, and generate client reports.

Quantify parameters provide significant flexibility to model populations and plan designs. Various demographic, economic and benefit related assumptions exist for users to model multiple demographic and economic situations.

Plan liabilities are calculated based on standard actuarial techniques, developing actuarially reasonable results using the population and parameters entered. The calculation and presentation of liabilities in Quantify relies on the assumptions used and the reasonability of the assumptions selected.

Quantify incorporates standard liability methodologies that are intended to reasonably reflect a variety of economic or demographic conditions. The model itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence.

Quantify is designed specifically for these purposes, and we know of no material limitations that would prevent the system from being suitable for these intended purposes. The actuaries signing this report have relied on the actuaries who develop, test and maintain this system, and have also performed a limited review of results to ensure that system parameters have been set appropriately and plan provisions coded correctly.

Quantify Financial Reporting (FR) is intended to calculate funding results, accounting results and produce the associated client reports under selected accounting standards. The calculations and reports are based on various user specified inputs including liability results and asset values.

Quantify FR develops valuation results for various accounting and funding purposes using standard actuarial techniques.

Calculation of disclosure liabilities and results are based on roll forward liabilities.

Liability roll-forwards are used in accounting scenarios where the date as of which liabilities are valued does not coincide with the fiscal year measurement date. The roll-forwards consist of adjusting liabilities for the passage of time.

The estimate of the following year's expense is calculated based on the obligations and assets used for disclosure and

## RATE: Link

## BOND:Link

## Expected Return Estimator

incorporates service cost that may be based on a projection in the associated Quantify liability run, depending on the relationship of the liability valuation date to the fiscal year.

The Roll Forward accounting calculations assume that applicable rules will not change during the roll-forward period. Actuaries make adjustments to the data, plan provisions and assumptions reflected in the calculation of the liabilities that are rolled forward so that the results reflect conditions at the measurement date, and/or make similar adjustments to the results of the roll forward, including reflecting any changes in applicable accounting standards.

RATE: Link is a methodology to develop spot rates to be used for liability and cost measurements related to employee benefit plans. The same core methodology is used to develop all RATE: curves. The RATE: Link process develops term structures of interest rates from corporate bond data for each covered geography (e.g., the U.S. for this valuation).

The construction of RATE: Link yield curves relies on bond data collected as of the measurement date.

Information regarding quoted bond prices, yields and other bond related data is from Bloomberg Finance L.P.
U.S. BOND:Link is a methodology to assist with the selection of discount rates used in liability and cost measurements related to employee benefit plans. Discount rates are derived by identifying a theoretical settlement portfolio of high-quality corporate bonds sufficient to provide for a plan's projected benefit payments. The single interest rate is then determined that results in a discounted value of the plan's benefit payments that equals the market value of the selected bond portfolio.

Updated BOND:Link models are developed monthly as of the last day of the month. The construction of a BOND:Link model relies on bond data collected as of the measurement date. Parameters provide the user the ability to control aspects of the model. The model output allows the user to see the effects of those parameters.

Information regarding quoted bond prices, yields and other bond related data is from Bloomberg Finance L.P.

The Expected Return Estimator is used to help inform the choice of an expected return assumption (e.g., as one data point to consider) for returns on the assets of the trust.

The tool depends on the capital market assumptions chosen at the starting date of the simulation. These assumptions reflect currently prevailing capital market conditions, assumed future

## SWIFT

conditions ("normative conditions"), and the transition from the current conditions to the normative ones.

The assumed normative conditions incorporate a blend of historical capital market data and future expectations. The sources consulted in the determination of normative levels include practitioners in our global actuarial and investment consulting practices, plan sponsors, investment managers, economists, and academics.

Swift is intended to develop projections of plan (pension and OPRB plans) and/or asset values based on various user specified inputs. These amounts are then used to develop contribution and cost results under selected accounting standards and funding regulations. The time horizon for the analysis is 10 full future years.

The parameters provide a great deal of flexibility to model populations and plan designs. Various demographic and economic assumptions exist for users to model multiple demographic and economic scenarios. The Swift model for liabilities is a simplified alternative to using a full valuation system to develop projections of plan liabilities. The assumptions used to control the projected asset values are intended to be flexible enough to model a variety of scenarios reflecting the investment mix of the plan modeled.

Plan liabilities are initially projected based on standard actuarial techniques for a roll-forward based on the population/design parameters entered. The liabilities are then adjusted with inputs providing their sensitivity to various economic experience and valuation assumptions.

Assets are projected on a monthly basis reflecting the data, calculated cash flows, and input assumptions.

The model itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence.

Funding and accounting calculations assume that applicable rules will not change during the forecast horizon.

Certain details are not reflected in the model. For example, special events (curtailments, settlements, termination benefits) are not included in the standard accounting calculations. Additionally, the model does not support interim remeasurements of benefit cost. Actuaries make adjustments to the data, plan provisions and assumptions reflected in the calculation of the liabilities that are projected forward so that the results reflect conditions at the measurement date, and/or make similar adjustments to the results of the projection, including reflecting any changes in applicable accounting standards.

## RPEC Model Implementation Tools

The MIM-2021 Model Implementation Tools are used to construct a mortality improvement scale is intended to produce future mortality improvement rates by age, year and gender based on historical mortality experience data, certain model inputs and a graduation algorithm to create a smooth transition from historical rates to projected rates. The Retirement Plans Experience Committee of the Society of Actuaries (RPEC) collects the data, defines the input parameters, develops and maintains the model. The RPEC annually publishes an update to this model for use by actuaries, and we have relied on the 2021 version of this model.

The input parameters that can be used as published or modified by the user include: long-term improvement rate, horizontal (by age) convergence period, diagonal (by year of birth) convergence period, convergence blending percentages and initial slope constraint.

## Summary of principal pension plan provisions

The plan consists of former Plan A participants, and former Plan B participants that had terminated employment with ALLETE on or before December 31, 2015 which were spun off into Plan C on January 1, 2016. The plan has no service accruals and new employees are not eligible to participate in the plan.

## Plan Provisions for Plan A Participants

## Plan Provisions

The most recent amendment reflected in the following plan provisions was adopted on September 10, 2019, effective December 31, 2018.

Covered employees All nonunion employees age 18 or older that were hired before October 1, 2006

The plan consists of former Plan A participants, and former Plan B participants that had terminated employment with ALLETE on or before December 31, 2015 that were spun off into Plan C on January 1, 2016. The plan has no service accruals and new employees are not eligible to participate in the plan.

Date of becoming a covered employee

## Definitions

## Credited service

Continuous service

Pensionable earnings

Final average earnings

Service was frozen for all participants as of October 1, 2006.
The period of continuous employment as a regular employee of the company including service as an employee of any predecessor company. Periods on disability where LTD benefits are being received are included.

Basic compensation is defined as straight time pay including results sharing and excluding overtime and bonuses.

Highest average compensation received for 48 consecutive months during the 15 years of service immediately preceding retirement or termination. Compensation is limited as required under Internal Revenue Code Section 401(a)(17). Final average earnings are frozen for all participants effective November 30, 2018.

Eligible spouse

Transferred employees

The person who was married to an employee for at least one year immediately prior to the employee's retirement date.

For employees who transfer between Plan A and Plan B, the accrued benefit to the date of transfer remains payable from the former plan. The former accrued benefit is adjusted for pay at the date of termination versus pay at the date of transfer. The adjustment is payable from the new plan. The new plan also provides a benefit for service from the date of transfer.

Eligibility for Benefits

## Normal retirement

## Early retirement

Postponed retirement

Deferred vested termination

Disability

Preretirement death benefit

Age 65 with five years of service

Age 50 with ten years of service

Retirement after NRD

Five years of service

Five years of service

Five years of service

## Benefits Paid Upon the Following Events

## Normal retirement

## Early retirement

For service before July 1, 1980:

10\% plus 1\% of final average earnings for each year of service (maximum 50\%)

For service after July 1, 1980:
$0.8 \%$ of final average earnings for each year of service

Minimum benefit:

Each participant as of December 31, 1991 is entitled to a minimum benefit equal to their accrued benefit on that date multiplied by the final average pay at retirement divided by their final average pay on December 31, 1991.

Credited service was frozen for all participants as of October 1, 2006.

Final average earnings are frozen for all participants as of November 30, 2018.

Normal retirement reduced by $1 / 3$ of $1 \%$ for each month between early retirement date and age 62. Benefits are unreduced at age 58 with 40 or more years of service.

## Deferred vested termination

## Disablement

## Preretirement death

The proportionate part (based on service to termination divided by expected service at age 65) of the benefit expected at age 65, available as a deferred annuity. Participants with at least 10 years of vesting service upon termination are eligible for early retirement described above. Participants with at least 5 years of vesting service but less than 10 years of vesting service upon termination cannot receive until age 65 .

Same as normal retirement, assuming compensation continues prior to commencement at the rate in effect immediately before the participant became totally disabled. Service continues to accrue during the participant's period of disability.

Upon the death of an active participant, a monthly benefit equal to $60 \%$ of the benefit the employee could have received if he had terminated on the date of death and began receiving payments on his earlier retirement date.

## Other Plan Provisions

## Forms of payment

## Cost -of-Living Adjustment

Automatic form for unpaired participants: the normal form is a life annuity.

Automatic form for married participants: for an employee with an eligible spouse (who elected out of the 1970 contributory life insurance program), the normal form is a $60 \%$ joint and survivor annuity.

Optional forms: life annuity; $60 \%, 75 \%$ and $100 \%$ contingent beneficiary annuities; $50 \%$ joint and survivor annuity; 10-year certain and life annuity; and social security level income annuity.

Optional forms conversion factors:
10-year certain and life annuity: $0.92+0.005 \times(65-$ participant age)
$75 \%$ contingent beneficiary annuity: $0.97-0.002 \times$ (participant age - spouse age), not greater than 100\%
$100 \%$ contingent beneficiary annuity: $0.92-0.003 \times$ (participant age - spouse age), not greater than $100 \%$

50\% joint and survivor annuity: $0.94-0.007 \times$ (participant age spouse age), not greater than 100\%

All age differences are calculated as full years.
$50 \%$ of the benefit at retirement is subject to adjustment on each May 1 and November 1. The adjustment is equal to the percentage change in the Consumer Price Index. Maximum increase equals $3 \%$ times the number of adjustment dates since retirement. Benefit cannot decrease below initially determined amount.

Maximum limits on benefits and Compensation for any 12-month period used to determine accrued pay benefits may not exceed the limits in IRC Section 401(a)(17) for the calendar year in which the 12-month period begins. This limit is indexed annually.

Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually.

## Future Plan Changes

None.

## Changes in Benefits Valued Since Prior Year

None.

## Plan Provisions for Plan B Participants

| Plan Provisions |  |
| :---: | :---: |
| Covered employees | All union employees hired before February 1, 2011 and all union SWL\&P employees. |
| Participation date | Age 18 and over that have 1,000 or more hours of service in a plan year. |
| Definitions |  |
| Continuous service | The period of continuous employment as a regular employee of the company including service as an employee of any predecessor company. Periods on disability where LTD benefits are being received are included. |
| Pensionable earnings | Pensionable earnings are defined as straight time pay including results sharing excluding overtime and bonuses. |
| Final average earnings | Highest average compensation received for 48 consecutive months during the 15 years of service immediately preceding retirement or termination. Compensation is limited as required under Internal Revenue Code Section 401(a)(17). |
| Eligible spouse | The person who was married to an employee for at least one year immediately prior to the employee's retirement date. |
| Transferred employees | For employees who transfer between Plan A and Plan B, the accrued benefit to the date of transfer remains payable from the former plan. The former accrued benefit is adjusted for pay at the date of termination versus pay at the date of transfer. The adjustment is payable from the new plan. Final average earnings are frozen as of November 30, 2018 for participants that have transferred from Plan B into Plan A. |
| Eligibility for Benefits |  |
| Normal retirement | Age 65 with five years of service |
| Early retirement | Age 50 with ten years of service |
| Postponed retirement | Retirement after NRD |
| Deferred vested termination | Any age with five years of service |
| Disability | Any age with five years of service |
| Preretirement death benefit | Five years of service |

## Benefits Paid Upon the Following Events

Normal retirement
Early retirement
Postponed retirement
Deferred vested termination

## Disablement

## Preretirement death

Greater of:
$1.6 \%$ of final average earnings for each year of service (for participants of the plan effective February 1, 2001)

OR
$5 \%$ of final average earnings plus $1.35 \%$ of final average earnings for each year of service (for participants of the plan prior to February 1, 2001)

Same as normal retirement benefit reduced by $1 / 3$ of $1 \%$ for each month between the early retirement date and age 62 . Benefits are unreduced at age 58 with 40 or more years of service.

Active participants: The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age $701 / 2$.

The proportionate part (based on service to termination divided by expected service at age 65) of the benefit expected at age 65, available as a deferred annuity. Participants with at least 10 years of vesting service upon termination are eligible for early retirement described above. Participants with at least 5 years of vesting service but less than 10 years of vesting service upon termination cannot receive until age 65 .

Same as normal retirement, assuming compensation continues prior to commencement at the rate in effect immediate before the participant became totally disabled. Service continues to accrue during the participant's period of disability.

Upon the death of an active participant, a monthly benefit equal to the larger of (a), (b), or (c) is payable for life:
(a) $25 \%$ of current compensation.
(b) $50 \%$ of compensation less Social Security benefits.
(c) A monthly benefit equal to $50 \%$ of the benefit the employee could have received if he had terminated on the date of death and began receiving payments on his earliest retirement date.

Benefits (a) and (b) are not subject to the cost-of-living adjustment and are subject to certain flat dollar maximums. Benefit (c) is subject to the cost-of-living adjustment.

## Other Plan Provisions

## Forms of payment

## Cost-of-Living Adjustment

Automatic form for unmarried participants: the normal form is a life annuity.

Automatic form for married participants: for an employee with an eligible spouse (who elected out of the 1970 contributory life insurance program), the normal form is a $50 \%$ joint and survivor annuity.

Optional forms: life annuity; 50\%, $75 \%$ and $100 \%$ contingent beneficiary annuities; 50\% joint and survivor annuity; 10-year certain and life annuity; and social security level income annuity.

Optional forms conversion factors:
10-year certain and life annuity: $0.92+0.005 \times(65-$ participant age)

75\% contingent beneficiary annuity: $0.97-0.002 \times$ (participant age - spouse age), not greater than $100 \%$
$100 \%$ contingent beneficiary annuity: $0.92-0.003 \times$ (participant age - spouse age), not greater than 100\%

50\% joint and survivor annuity: 0.94-0.007x (participant age spouse age), not greater than 100\%

All age differences are calculated as full years.
$50 \%$ of the benefit at retirement is subject to adjustment on each May 1 and November 1. The adjustment is equal to the percentage change in the Consumer Price Index. Maximum increase equals 3\% times the number of adjustment dates since retirement. Benefit cannot decrease below initially determined amount.

Maximum limits on benefits and Compensation for any 12-month period used to determine accrued pay
benefits may not exceed the limits in IRC Section 401(a)(17) for the calendar year in which the 12-month period begins. This limit is indexed annually.

Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually.

## Future Plan Changes

None.

## Changes in Benefits Valued Since Prior Year

None.

Minnesota Power Docket No. E015/GR-23-155

## Expected Return Estimator - OPEB Summary

| Asset Class Name | April 2023 |  |
| :---: | :---: | :---: |
|  | Expected 1 Year Return | Allocation |
| Large-Cap Stocks | 8.52\% | 16.0\% |
| Mid-Cap Stocks | 8.79\% | 15.0\% |
| Small-Cap Stocks | 8.79\% | 7.3\% |
| International Stocks | 8.96\% | 12.0\% |
| Emerging Markets | 11.61\% | 10.0\% |
| Real Estate | 6.80\% | 2.3\% |
| Long High Quality Bonds | 5.83\% | 35.0\% |
| Cash/Treasury Bills | 3.86\% | 2.4\% |
| Probability Distribution of Geometric Returns for 20 Years | Nominal* |  |
| 75th Percentile | 8.2\% |  |
| 50th Percentile | 7.0\% |  |
| 25th Percentile | 5.9\% |  |

[^24]| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Total USD | Non-Union Total USD | Union Total USD |
| Disclosed Benefit Cost | 31-Dec-22 | 31-Dec-22 | 31-Dec-22 |
| A Disclosed Benefit Cost |  |  |  |
| 1 Employer service cost | 2,925,019 | 1,375,143 | 1,549,876 |
| 2 Interest cost | 4,372,164 | 2,303,540 | 2,068,624 |
| 3 Expected return on plan assets | $(9,628,240)$ | $(4,208,498)$ | $(5,419,742)$ |
| 4 Subtotal | $(2,331,057)$ | $(529,815)$ | $(1,801,242)$ |
| 5 Net prior service cost/(credit) amortization | $(7,516,821)$ | $(3,766,525)$ | $(3,750,296)$ |
| 6 Net loss/(gain) amortization | 378,658 | 98,069 | 280,589 |
| 7 Subtotal | $(7,138,163)$ | $(3,668,456)$ | $(3,469,707)$ |
| 8 Net periodic postretirement benefit cost/(income) | $(9,469,220)$ | $(4,198,271)$ | $(5,270,949)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Disclosed net benefit cost | $(9,469,220)$ | $(4,198,271)$ | $(5,270,949)$ |
| B Presentation of Benefit Cost Pursuant to ASC 715-20 |  |  |  |
| 1 Employer service cost | 2,925,019 | 1,375,143 | 1,549,876 |
| 2 Other components of net periodic benefit cost | $(12,394,239)$ | $(5,573,414)$ | $(6,820,825)$ |
| 3 Other adjustments to net benefit cost | 0 | 0 | 0 |
| 4 Disclosed net benefit cost | (9,469,220) | $(4,198,271)$ | $(5,270,949)$ |
| C Assumptions Used to Determine Benefit Cost |  |  |  |
| 1 Discount rate | 3.090\% | 3.090\% | 3.090\% |
| 2 Expected long-term rate of return on plan assets | 5.407\% | 4.800\% | 6.000\% |
| 3 Current health care cost trend rate | 5.660\% | 5.660\% / 5.000\% | 5.660\% / 5.000\% |
| 4 Ultimate health care cost trend rate | 4.500\% | 4.500\% | 4.500\% |
| 5 Year of ultimate trend rate | 2038 | 2038 | 2038 |
| Balance Sheet Asset/(Liability) |  |  |  |
| A Development of Balance Sheet Asset/(Liability) |  |  |  |
| 1 Accumulated postretirement benefit obligation (APBO) | $(109,022,799)$ | $(57,372,437)$ | $(51,650,362)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 162,630,894 | 80,569,102 | 82,061,792 |
| 3 Net balance sheet asset/(liability) | 53,608,095 | 23,196,665 | 30,411,430 |
| B Current and Noncurrent Classification |  |  |  |
| 1 Noncurrent asset | 53,608,095 | 27,660,134 | 31,149,579 |
| 2 Current liability | 0 | 0 | 0 |
| 3 Noncurrent liability | 0 | $(4,463,469)$ | $(738,149)$ |
| 4 Net balance sheet asset/(liability) | 53,608,095 | 23,196,665 | 30,411,430 |
| C Reconciliation of Net Balance Sheet Asset/(Liability) |  |  |  |
| 1 Net balance sheet asset/(liability) at end of prior fiscal year | 56,353,046 | 23,719,174 | 32,633,872 |
| 2 Employer service cost | $(2,925,019)$ | $(1,375,143)$ | $(1,549,876)$ |
| 3 Interest cost | $(4,372,164)$ | $(2,303,540)$ | $(2,068,624)$ |
| 4 Expected return on plan assets | 9,628,240 | 4,208,498 | 5,419,742 |
| 5 Plan amendments | 0 | 0 | 0 |
| 6 Actuarial gain/(loss) | $(5,201,447)$ | $(1,177,763)$ | $(4,023,684)$ |
| 7 Employer contributions | 0 | 0 | 0 |
| 8 Benefits paid directly by the Company, net of retiree contributions | 125,439 | 125,439 | 0 |
| 9 Medicare Part D subsidy on benefits paid during the year | 0 | 0 | 0 |
| 10 Acquisitions/divestitures | 0 | 0 | 0 |
| 11 Curtailments | 0 | 0 | 0 |
| 12 Settlements (if settled using corporate cash) | 0 | 0 | 0 |
| 13 Special/contractual termination benefits | 0 | 0 | 0 |
| 14 Net balance sheet asset /(liability) at end of current fiscal year | 53,608,095 | 23,196,665 | 30,411,430 |
| D Assumptions and Dates Used for Disclosure |  |  |  |
| 1 Discount rate |  | 5.680\% | 5.680\% |
| 2 Current health care cost trend rate |  | 6.500\% / 6.000\% | 6.500\% / 6.000\% |
| 3 Ultimate health care cost trend rate |  | 5.000\% | 5.000\% |
| 4 Year of ultimate trend rate |  | 2038 | 2038 |
| 5 Census date |  | 1-Jan-22 | 1-Jan-22 |

## WillisTowers Watson Inl|l|ll

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Total | Non-Union Total | Union Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| A Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| 1 Net prior service cost/(credit) | $(13,144,821)$ | $(7,558,999)$ | $(5,585,822)$ |
| 2 Net loss/(gain) | $(7,534,136)$ | $(5,398,204)$ | $(2,135,932)$ |
| 3 Accumulated other comprehensive (income)/loss |  |  |  |
| B Development of Accumulated Other Comprehensive (Income)/Loss (AOCI) |  |  |  |
| 1 AOCl at prior fiscal year end | $(33,018,567)$ | $(17,803,422)$ | $(15,215,145)$ |
| 2 Amounts amortized during the year |  |  |  |
| a. Net prior service (cost)/credit | 7,516,821 | 3,766,525 | 3,750,296 |
| b. Net (loss)/gain | $(378,658)$ | $(98,069)$ | $(280,589)$ |
| 3 Occurring during the year |  |  |  |
| a. Net prior service cost/(credit) | 0 | 0 | 0 |
| b. Net loss/(gain) | 5,201,447 | 1,177,763 | 4,023,684 |
| 4 Amounts recognized due to curtailment/settlement |  |  |  |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 0 | 0 | 0 |
| 5 AOCI at current fiscal year end | $(20,678,957)$ | $(12,957,203)$ | (7,721,754) |
| Additional Disclosure Information |  |  |  |
| A Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 Fully eligible actives | 18,615,969 | 8,955,250 | 9,660,719 |
| 2 Other actives | 14,456,545 | 6,438,758 | 8,017,787 |
| 3 Retirees, dependents and surviving spouses | 75,950,285 | 41,978,429 | 33,971,856 |
| 4 Accumulated postretirement benefit obligation | 109,022,799 | 57,372,437 | 51,650,362 |
| B Expected Future Benefit Payments, Net of Retiree Contributions, and Medicare Part D Subsidies Benefit payments |  |  |  |
|  |  |  |  |
| 1 During fiscal year ending December 31, 2023 | 6,958,419 | 3,832,359 | 3,126,060 |
| 2 During fiscal year ending December 31, 2024 | 7,243,630 | 3,926,479 | 3,317,151 |
| 3 During fiscal year ending December 31, 2025 | 7,354,263 | 3,987,285 | 3,366,978 |
| 4 During fiscal year ending December 31, 2026 | 7,552,501 | 4,060,231 | 3,492,270 |
| 5 During fiscal year ending December 31, 2027 | 7,826,914 | 4,208,217 | 3,618,697 |
| 6 During fiscal years ending December 31, 2028 through December 31, 2032 | 41,675,690 | 21,796,089 | 19,879,601 |
| C Expected Contributions during Fiscal Year ending December 31, 2023 |  |  |  |
| 1 Employer | 0 | 0 | 0 |
| 2 Plan participants | 0 | 0 | 0 |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Total | Non-Union Total | Union Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Changes in Disclosed Plan Obligations and Assets |  |  |  |
| A Change in Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 APBO at prior fiscal year end | 145,444,159 | 76,745,533 | 68,698,626 |
| 2 Employer service cost | 2,925,019 | 1,375,143 | 1,549,876 |
| 3 Interest cost | 4,372,164 | 2,303,540 | 2,068,624 |
| 4 Actuarial loss/(gain) | $(37,447,544)$ | $(19,552,853)$ | $(17,894,691)$ |
| 5 Plan participants' contributions | 2,635,259 | 1,427,250 | 1,208,009 |
| 6 Benefits paid from plan assets | $(8,780,819)$ | $(4,800,737)$ | $(3,980,082)$ |
| 7 Benefits paid from Company assets | $(125,439)$ | $(125,439)$ | 0 |
| 8 Medicare Part D subsidy | 0 | 0 | 0 |
| 9 Administrative expenses paid | 0 | 0 | 0 |
| 10 Plan amendments | 0 | 0 | 0 |
| 11 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 12 Curtailments | 0 | 0 | 0 |
| 13 Settlements | 0 | 0 | 0 |
| 14 Special/contractual termination benefits | 0 | 0 | 0 |
| 15 APBO at current fiscal year end | 109,022,799 | 57,372,437 | 51,650,362 |
| B Change in Plan Assets |  |  |  |
| 1 Fair value of plan assets at prior fiscal year end | 201,797,205 | 100,464,707 | 101,332,498 |
| 2 Actual return on plan assets | $(33,020,751)$ | $(16,522,118)$ | $(16,498,633)$ |
| 3 Employer contributions | 125,439 | 125,439 | 0 |
| 4 Plan participants' contributions | 2,635,259 | 1,427,250 | 1,208,009 |
| 5 Benefits paid | $(8,906,258)$ | $(4,926,176)$ | $(3,980,082)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Fair value of plan assets at current fiscal year end | 162,630,894 | 80,569,102 | 82,061,792 |
| Reconciliation of Net Balances |  |  |  |
| A Reconciliation of Prior Service Cost/(Credit) Bases | 0 |  |  |
| 1 Net amount at prior fiscal year end | $(20,661,642)$ | $(11,325,524)$ | $(9,336,118)$ |
| 2 Amortization amount | 7,516,821 | 3,766,525 | 3,750,296 |
| 3 Plan amendments | 0 | 0 | 0 |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Other events | 0 | 0 | 0 |
| 6 Net amount at current fiscal year end | (13,144,821) | (7,558,999) | (5,585,822) |
| B Reconciliation of Net Loss/(Gain) |  |  |  |
| 1 Net amount at prior fiscal year end | $(12,356,925)$ | (6,477,898) | $(5,879,027)$ |
| 2 Amount recognized | $(378,658)$ | $(98,069)$ | $(280,589)$ |
| 3 Experience loss/(gain) | 5,201,447 | 1,177,763 | 4,023,684 |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Effect of settlements | 0 | 0 | 0 |
| 6 Other events | 0 | 0 | 0 |
| 7 Net amount at current fiscal year end | $(7,534,136)$ | $(5,398,204)$ | (2,135,932) |

## WillisTowers Watson IIIIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Total | Non-Union Total | Union Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Development of Plan Assets for Benefit Cost |  |  |  |
| A Reconciliation of Fair Value of Plan Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-21 | 201,797,205 | 100,464,707 | 101,332,498 |
| 2 Actual return on plan assets | $(33,020,751)$ | $(16,522,118)$ | $(16,498,633)$ |
| 3 Employer contributions | 125,439 | 125,439 | 0 |
| 4 Plan participants' contributions | 2,635,259 | 1,427,250 | 1,208,009 |
| 5 Benefits paid, net of retiree contributions | $(8,906,258)$ | $(4,926,176)$ | $(3,980,082)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Fair value of plan assets at 31-Dec-22 | 162,630,894 | 80,569,102 | 82,061,792 |
| B Reconciliation of Market-Related Value of Plan Assets |  |  |  |
| 1 Market-related value of plan assets at 31-Dec-21 | 181,956,243 | 89,874,350 | 92,081,893 |
| 2 Actual return on plan assets | 6,341,162 | 2,846,431 | 3,494,731 |
| 3 Employer contributions | 125,439 | 125,439 | 0 |
| 4 Plan participants' contributions | 2,635,259 | 1,427,250 | 1,208,009 |
| 5 Benefits paid, net of retiree contributions | $(8,906,258)$ | $(4,926,176)$ | $(3,980,082)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Market-related value of plan assets at 31-Dec-22 | 182,151,845 | 89,347,294 | 92,804,551 |
| C Rate of Return on Invested Assets |  |  |  |
| 1 Weighted invested assets | 198,724,424 | 98,777,963 | 99,946,461 |
| 2 Rate of return | (16.617\%) | (16.727\%) | (16.508\%) |
| D Investment Loss/(Gain) |  |  |  |
| 1 Actual return | $(33,020,751)$ | $(16,522,118)$ | $(16,498,633)$ |
| 2 Expected return | 10,738,129 | 4,741,342 | 5,996,787 |
| 3 Loss/(gain) | 43,758,880 | 21,263,460 | 22,495,420 |
| E Market-Related Value of Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-22 | 162,630,894 | 80,569,102 | 82,061,792 |
| 2 Deferred investment (gains) and losses for the last 5 years <br> a. Deferred amount from measurement year ending 31-Dec-22 |  |  |  |
| i. (Gain)/Loss | 43,758,880 | 21,263,460 | 22,495,420 |
| ii. Percent recognized | N/A | 20.000\% | 20.000\% |
| iii. Percent deferred | N/A | 80.000\% | 80.000\% |
| iv. Deferred amount | 35,007,103 | 17,010,767 | 17,996,336 |
| b. Deferred amount from measurement year ending 31-Dec-21 |  | 0 | 0 |
| i. (Gain)/Loss | $(12,123,657)$ | (6,877,802) | $(5,245,855)$ |
| ii. Percent recognized | N/A | 40.000\% | 40.000\% |
| iii. Percent deferred | N/A | 60.000\% | 60.000\% |
| iv. Deferred amount | $(7,274,193)$ | $(4,126,681)$ | $(3,147,512)$ |
| c. Deferred amount from measurement year ending 31-Dec-20 |  | 0 | 0 |
| i. (Gain)/Loss | $(10,625,047)$ | $(5,492,641)$ | $(5,132,406)$ |
| ii. Percent recognized | N/A | 60.000\% | 60.000\% |
| iii. Percent deferred | N/A | 40.000\% | 40.000\% |
| iv. Deferred amount | $(4,250,020)$ | $(2,197,057)$ | $(2,052,963)$ |
| d. Deferred amount from measurement year ending 31-Dec-19 |  | 0 | 0 |
| i. (Gain)/Loss | $(19,809,697)$ | $(9,544,183)$ | $(10,265,514)$ |
| ii. Percent recognized | N/A | 80.000\% | 80.000\% |
| iii. Percent deferred | N/A | 20.000\% | 20.000\% |
| iv. Deferred amount | (3,961,939) | $(1,908,837)$ | $(2,053,102)$ |
| e. Deferred amount from measurement year ending 31-Dec-18 |  | 0 | 0 |
| i. (Gain) / Loss | 20,784,344 | 10,125,708 | 10,658,636 |
| ii. Percent recognized | N/A | 100.000\% | 100.000\% |
| iii. Percent deferred | N/A | 0.000\% | 0.000\% |
| iv. Deferred amount | 0 | 0 | 0 |
| f. Total deferred amount | 19,520,951 | 8,778,192 | 10,742,759 |
| 3 Market-related value of assets | 182,151,845 | 89,347,294 | 92,804,551 |

## WillisTowers Watson Inl|l|ll

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Total USD | Non-Union Total USD | Union Total USD |
| Summary and Comparison of Benefit Cost and Cash Flows | 31-Dec-23 | 31-Dec-23 | 31-Dec-23 |
| A Total Benefit Cost |  |  |  |
| 1 Employer service cost | 2,171,038 | 1,056,349 | 1,114,689 |
| 2 Interest cost | 5,994,876 | 3,149,915 | 2,844,961 |
| 3 Expected return on plan assets | $(11,283,048)$ | $(4,896,142)$ | $(6,386,906)$ |
| 4 Subtotal | $(3,117,134)$ | $(689,878)$ | $(2,427,256)$ |
| 5 Net prior service cost/(credit) amortization | $(7,027,197)$ | $(3,718,151)$ | $(3,309,046)$ |
| 6 Net loss/(gain) amortization | $(1,961,227)$ | $(1,293,080)$ | $(668,147)$ |
| 7 Subtotal | $(8,988,424)$ | $(5,011,231)$ | $(3,977,193)$ |
| 8 Net periodic postretirement benefit cost/(income) | $(12,105,558)$ | $(5,701,109)$ | $(6,404,449)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Total benefit cost | $(12,105,558)$ | $(5,701,109)$ | $(6,404,449)$ |
| B Assumptions |  |  |  |
| 1 Discount rate |  | 5.680\% | 5.680\% |
| 2 Expected long-term rate of return on plan assets |  | 5.600\% | 7.000\% |
| 3 Current health care cost trend rate |  | 6.500\% / 6.000\% | 6.500\% / 6.000\% |
| 4 Ultimate health care cost trend rate |  | 5.000\% | 5.000\% |
| 5 Year of ultimate trend rate |  | 2038 | 2038 |
| 6 Census date |  | 1-Jan-22 | 1-Jan-22 |
| C Plan Assets at Beginning of Year |  |  |  |
| 1 Fair value | 162,630,894 | 80,569,102 | 82,061,792 |
| 2 Market-related value | 182,151,845 | 89,347,294 | 92,804,551 |
| D Expected Cash Flows Net of Medicare Part D Subsidy |  |  |  |
| 1 Employer contributions | 0 | 0 | 0 |
| 2 Plan participants' contributions | 0 | 0 | 0 |
| 3 Benefits paid from Company assets | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 6,958,418 | 3,832,358 | 3,126,060 |
| E Amortization Period |  |  |  |
| 1 For gain/loss amortization, if applicable | N/A |  |  |
| 2 For new prior service cost bases, if any | N/A |  |  |

## WillisTowers Watson IIIIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Total | Non-Union Total | Union Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Participant Information - Census Date | 1-Jan-22 | 1-Jan-22 | 1-Jan-22 |
| A Participating Employees |  |  |  |
| 1 Number | 748 | 276 | 472 |
| 2 Average age | 46.85 | 49.74 | 45.16 |
| 3 Average credited service | 16.08 | 20.46 | 13.52 |
| B Retirees, Dependents and Surviving Spouses |  |  |  |
| 1 Retirees | 1,207 | 704 | 503 |
| 2 Average age | 71.75 | 72.53 | 70.66 |
| 3 Surviving spouses and surviving dependents | 230 | 138 | 92 |
| 4 Average age | 79.90 | 80.89 | 78.41 |
| 5 Total retirees, surviving spouses and surviving dependents | 1,437 | 842 | 595 |
| 6 Average age | 73.05 | 73.90 | 71.86 |
| C Other Participants |  |  |  |
| 1 Number | 0 | 0 | 0 |
| 2 Average age | N/A | N/A | N/A |
| Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| Amortization Details of Plan Amendment \#1 |  |  |  |
| 1 Net amount at 31-Dec-21 | $(895,504)$ | $(48,374)$ | $(847,130)$ |
| 2 Amortization amount during 2022 | 692,564 | 48,374 | 644,190 |
| 3 Effect of curtailments | 0 | 0 | 0 |
| 4 Other events | 0 | 0 | 0 |
| 5 Net amount at 31-Dec-22 | $(202,940)$ | 0 | $(202,940)$ |
| 6 Remaining amortization period | N/A |  |  |
| Amortization Details of Plan Amendment \#2 |  |  |  |
| 1 Net amount at 31-Dec-21 | $(19,766,138)$ | $(11,277,150)$ | $(8,488,988)$ |
| 2 Amortization amount during 2022 | 6,824,257 | 3,718,151 | 3,106,106 |
| 3 Effect of curtailments | 0 | 0 | 0 |
| 4 Other events | 0 | 0 | 0 |
| 5 Net amount at 31-Dec-22 | $(12,941,881)$ | $(7,558,999)$ | $(5,382,882)$ |
| 6 Remaining amortization period | N/A |  |  |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| A Reconciliation of Amounts Recognized in Statement of Financial Position |  |  |  |
| 1 Accumulated postretirement benefit obligation | (109,022,799) | $(57,372,437)$ | (51,650,362) |
| 2 Fair value of plan assets, excluding receivable contributions | 134,141,062 | 80,569,102 | 82,061,792 |
| 3 Net balance sheet asset/(liability) | 53,608,095 | 23,196,665 | 30,411,430 |
| 4 Net prior service cost/(credit) | $(13,144,821)$ | $(7,558,999)$ | $(5,585,822)$ |
| 5 Net loss/(gain) | (7,534,136) | $(5,398,204)$ | $(2,135,932)$ |
| 6 Accumulated Employer contributions in excess of net periodic benefit cost | 32,929,138 | 10,239,462 | 22,689,676 |
| B Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| 1 Amount as of beginning of year | 23,334,479 | 5,915,752 | 17,418,727 |
| 2 Net periodic postretirement benefit (cost)/income | 9,469,220 | 4,198,271 | 5,270,949 |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 0 | 0 | 0 |
| 5 Benefits paid from Company assets | 125,439 | 125,439 | 0 |
| 6 Other recognized loss/(gain) | 0 | 0 | 0 |
| 7 Other adjustments | 0 | 0 | 0 |
| 8 Amount as of end of year | 32,929,138 | 10,239,462 | 22,689,676 |

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| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Medical Total USD | Non-Union Medical Total USD | Union Medical Total USD |
| Disclosed Benefit Cost | 31-Dec-22 | 31-Dec-22 | 31-Dec-22 |
| A Disclosed Benefit Cost |  |  |  |
| 1 Employer service cost | 2,572,880 | 1,242,965 | 1,329,915 |
| 2 Interest cost | 3,156,826 | 1,651,429 | 1,505,397 |
| 3 Expected return on plan assets | $(7,918,833)$ | $(3,521,244)$ | $(4,397,589)$ |
| 4 Subtotal | $(2,189,127)$ | $(626,850)$ | $(1,562,277)$ |
| 5 Net prior service cost/(credit) amortization | $(7,114,158)$ | $(3,766,525)$ | $(3,347,633)$ |
| 6 Net loss/(gain) amortization | 0 | 0 | 0 |
| 7 Subtotal | $(7,114,158)$ | $(3,766,525)$ | $(3,347,633)$ |
| 8 Net periodic postretirement benefit cost/(income) | $(9,303,285)$ | $(4,393,375)$ | $(4,909,910)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Disclosed net benefit cost | $(9,303,285)$ | $(4,393,375)$ | $(4,909,910)$ |
| B Presentation of Benefit Cost Pursuant to ASC 715-20 |  |  |  |
| 1 Employer service cost | 2,572,880 | 1,242,965 | 1,329,915 |
| 2 Other components of net periodic benefit cost | $(11,876,165)$ | $(5,636,340)$ | $(6,239,825)$ |
| 3 Other adjustments to net benefit cost | 0 | 0 | 0 |
| 4 Disclosed net benefit cost | $(9,303,285)$ | $(4,393,375)$ | $(4,909,910)$ |
| C Assumptions Used to Determine Benefit Cost |  |  |  |
| 1 Discount rate |  | 3.090\% | 3.090\% |
| 2 Expected long-term rate of return on plan assets |  | 4.800\% | 6.000\% |
| 3 Current health care cost trend rate |  | 5.660\% | 5.660\% |
| 4 Ultimate health care cost trend rate |  | 4.500\% | 4.500\% |
| 5 Year of ultimate trend rate |  | 2038 | 2038 |
| Balance Sheet Asset/(Liability) |  |  |  |
| A Development of Balance Sheet Asset/(Liability) |  |  |  |
| 1 Accumulated postretirement benefit obligation (APBO) | $(78,770,797)$ | $(41,071,897)$ | $(37,698,900)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 134,141,062 | 67,460,046 | 66,681,016 |
| 3 Net balance sheet asset/(liability) | 55,370,265 | 26,388,149 | 28,982,116 |
| B Current and Noncurrent Classification |  |  |  |
| 1 Noncurrent asset | 55,370,265 | 26,388,149 | 28,982,116 |
| 2 Current liability | 0 | 0 | 0 |
| 3 Noncurrent liability | 0 | 0 | 0 |
| 4 Net balance sheet asset/(liability) | 55,370,265 | 26,388,149 | 28,982,116 |
| C Reconciliation of Net Balance Sheet Asset/(Liability) |  |  |  |
| 1 Net balance sheet asset/(liability) at end of prior fiscal year | 61,051,473 | 28,813,787 | 32,237,686 |
| 2 Employer service cost | $(2,572,880)$ | $(1,242,965)$ | $(1,329,915)$ |
| 3 Interest cost | $(3,156,826)$ | $(1,651,429)$ | $(1,505,397)$ |
| 4 Expected return on plan assets | 7,918,833 | 3,521,244 | 4,397,589 |
| 5 Plan amendments | 0 | 0 | 0 |
| 6 Actuarial gain/(loss) | $(7,956,640)$ | $(3,138,793)$ | $(4,817,847)$ |
| 7 Employer contributions | 0 | 0 | 0 |
| 8 Benefits paid directly by the Company, net of retiree contributions | 86,305 | 86,305 | 0 |
| 9 Medicare Part D subsidy on benefits paid during the year | 0 | 0 | 0 |
| 10 Acquisitions/divestitures | 0 | 0 | 0 |
| 11 Curtailments | 0 | 0 | 0 |
| 12 Settlements (if settled using corporate cash) | 0 | 0 | 0 |
| 13 Special/contractual termination benefits | 0 | 0 | 0 |
| 14 Net balance sheet asset /(liability) at end of current fiscal year | 55,370,265 | 26,388,149 | 28,982,116 |
| D Assumptions and Dates Used for Disclosure |  |  |  |
| 1 Discount rate |  | 5.680\% | 5.680\% |
| 2 Current health care cost trend rate |  | 6.500\% | 6.500\% |
| 3 Ultimate health care cost trend rate |  | 5.000\% | 5.000\% |
| 4 Year of ultimate trend rate |  | 2038 | 2038 |
| 5 Census date |  | 1-Jan-22 | 1-Jan-22 |

## WillisTowers Watson Inl|lill



## WillisTowers Watson Inl|lill

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Medical Total USD | Non-Union Medical Total USD | Union Medical Total USD |
| Changes in Disclosed Plan Obligations and Assets |  |  |  |
| A Change in Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 APBO at prior fiscal year end | 105,313,449 | 55,176,347 | 50,137,102 |
| 2 Employer service cost | 2,572,880 | 1,242,965 | 1,329,915 |
| 3 Interest cost | 3,156,826 | 1,651,429 | 1,505,397 |
| 4 Actuarial loss/(gain) | $(27,447,474)$ | $(14,339,222)$ | $(13,108,252)$ |
| 5 Plan participants' contributions | 2,122,848 | 1,140,270 | 982,578 |
| 6 Benefits paid from plan assets | $(6,861,427)$ | $(3,713,587)$ | $(3,147,840)$ |
| 7 Benefits paid from Company assets | $(86,305)$ | $(86,305)$ | 0 |
| 8 Medicare Part D subsidy | 0 | 0 | 0 |
| 9 Administrative expenses paid | 0 | 0 | 0 |
| 10 Plan amendments | 0 | 0 | 0 |
| 11 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 12 Curtailments | 0 | 0 | 0 |
| 13 Settlements | 0 | 0 | 0 |
| 14 Special/contractual termination benefits | 0 | 0 | 0 |
| 15 APBO at current fiscal year end | 78,770,797 | 41,071,897 | 37,698,900 |
| B Change in Plan Assets |  |  |  |
| 1 Fair value of plan assets at prior fiscal year end | 166,364,922 | 83,990,134 | 82,374,788 |
| 2 Actual return on plan assets | $(27,485,281)$ | $(13,956,771)$ | $(13,528,510)$ |
| 3 Employer contributions | 86,305 | 86,305 | 0 |
| 4 Plan participants' contributions | 2,122,848 | 1,140,270 | 982,578 |
| 5 Benefits paid | $(6,947,732)$ | $(3,799,892)$ | $(3,147,840)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Fair value of plan assets at current fiscal year end | 134,141,062 | 67,460,046 | 66,681,016 |
|  |  |  |  |
| Reconciliation of Net Balances |  |  |  |
| A Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| 1 Net amount at prior fiscal year end | $(20,077,778)$ | $(11,325,524)$ | $(8,752,254)$ |
| 2 Amortization amount | 7,114,158 | 3,766,525 | 3,347,633 |
| 3 Plan amendments | 0 | 0 | 0 |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Other events | 0 | 0 | 0 |
| 6 Net amount at current fiscal year end | (12,963,620) | $(7,558,999)$ | $(5,404,621)$ |
| B Reconciliation of Net Loss/(Gain) |  |  |  |
| 1 Net amount at prior fiscal year end | $(14,649,564)$ | $(8,353,805)$ | $(6,295,759)$ |
| 2 Amount recognized | 0 | 0 | 0 |
| 3 Experience loss/(gain) | 7,956,640 | 3,138,793 | 4,817,847 |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Effect of settlements | 0 | 0 | 0 |
| 6 Other events | 0 | 0 | 0 |
| 7 Net amount at current fiscal year end | $(6,692,924)$ | $(5,215,012)$ | $(1,477,912)$ |

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| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Medical Total USD | Non-Union Medical Total USD | Union Medical Total $\square$ |
| Development of Plan Assets for Benefit Cost |  |  |  |
| A Reconciliation of Fair Value of Plan Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-21 | 166,364,922 | 83,990,134 | 82,374,788 |
| 2 Actual return on plan assets | $(27,485,281)$ | $(13,956,771)$ | (13,528,510) |
| 3 Employer contributions | 86,305 | 86,305 | 0 |
| 4 Plan participants' contributions | 2,122,848 | 1,140,270 | 982,578 |
| 5 Benefits paid, net of retiree contributions | $(6,947,732)$ | $(3,799,892)$ | (3,147,840) |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Fair value of plan assets at 31-Dec-22 | 134,141,062 | 67,460,046 | 66,681,016 |
| B Reconciliation of Market-Related Value of Plan Assets |  |  |  |
| 1 Market-related value of plan assets at 31-Dec-21 | 149,803,209 | 75,091,296 | 74,711,913 |
| 2 Actual return on plan assets | 5,215,166 | 2,341,983 | 2,873,183 |
| 3 Employer contributions | 86,305 | 86,305 | 0 |
| 4 Plan participants' contributions | 2,122,848 | 1,140,270 | 982,578 |
| 5 Benefits paid, net of retiree contributions | $(6,947,732)$ | $(3,799,892)$ | (3,147,840) |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Market-related value of plan assets at 31-Dec-22 | 150,279,796 | 74,859,962 | 75,419,834 |
| C Rate of Return on Invested Assets |  |  |  |
| 1 Weighted invested assets | 163,995,633 | 82,703,476 | 81,292,157 |
| 2 Rate of return | (16.760\%) | (16.876\%) | (16.642\%) |
| D Investment Loss/(Gain) |  |  |  |
| 1 Actual return | $(27,485,281)$ | $(13,956,771)$ | $(13,528,510)$ |
| 2 Expected return | 8,847,296 | 3,969,767 | 4,877,529 |
| 3 Loss/(gain) | 36,332,577 | 17,926,538 | 18,406,039 |
| E Market-Related Value of Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-22 | 134,141,062 | 67,460,046 | 66,681,016 |
| a. Deferred amount from measurement year ending 31-Dec-22 |  |  |  |
| i. (Gain)/ Loss | 36,332,577 | 17,926,538 | 18,406,039 |
| ii. Percent recognized | N/A | 20.000\% | 20.000\% |
| iii. Percent deferred | N/A | 80.000\% | 80.000\% |
| iv. Deferred amount | 29,066,061 | 14,341,230 | 14,724,831 |
| b. Deferred amount from measurement year ending 31-Dec-21 |  |  |  |
| i. (Gain)/ Loss | $(10,236,056)$ | $(5,847,172)$ | $(4,388,884)$ |
| ii. Percent recognized | N/A | 40.000\% | 40.000\% |
| iii. Percent deferred | N/A | 60.000\% | 60.000\% |
| iv. Deferred amount | $(6,141,633)$ | $(3,508,303)$ | $(2,633,330)$ |
| c. Deferred amount from measurement year ending 31-Dec-20 |  |  |  |
| i. (Gain)/Loss | $(8,753,097)$ | $(4,576,765)$ | $(4,176,332)$ |
| ii. Percent recognized | N/A | 60.000\% | 60.000\% |
| iii. Percent deferred | N/A | 40.000\% | 40.000\% |
| iv. Deferred amount | $(3,501,239)$ | $(1,830,706)$ | $(1,670,533)$ |
| d. Deferred amount from measurement year ending 31-Dec-19 |  |  |  |
| i. (Gain)/ Loss | $(16,422,275)$ | $(8,011,523)$ | $(8,410,752)$ |
| ii. Percent recognized | N/A | 80.000\% | 80.000\% |
| iii. Percent deferred | N/A | 20.000\% | 20.000\% |
| iv. Deferred amount | $(3,284,455)$ | $(1,602,305)$ | $(1,682,150)$ |
| e. Deferred amount from measurement year ending 31-Dec-18 |  |  |  |
| i. (Gain) / Loss | 17,239,498 | 8,647,840 | 8,591,658 |
| ii. Percent recognized | N/A | 100.000\% | 100.000\% |
| iii. Percent deferred | N/A | 0.000\% | 0.000\% |
| iv. Deferred amount | 0 | 0 | 0 |
| f. Total deferred amount | 16,138,734 | 7,399,916 | 8,738,818 |
| 3 Market-related value of assets | 150,279,796 | 74,859,962 | 75,419,834 |

## WillisTowers Watson Inl|l|ll

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Medical Total USD | Non-Union Medical Total USD | Union Medical Total USD |
| Summary and Comparison of Benefit Cost and Cash Flows | 31-Dec-23 | 31-Dec-23 | 31-Dec-23 |
| A Total Benefit Cost |  |  |  |
| 1 Employer service cost | 1,944,152 | 965,475 | 978,677 |
| 2 Interest cost | 4,323,116 | 2,250,947 | 2,072,169 |
| 3 Expected return on plan assets | $(9,305,570)$ | $(4,111,376)$ | $(5,194,194)$ |
| 4 Subtotal | $(3,038,302)$ | $(894,954)$ | $(2,143,348)$ |
| 5 Net prior service cost/(credit) amortization | $(6,845,996)$ | $(3,718,151)$ | $(3,127,845)$ |
| 6 Net loss/(gain) amortization | $(1,337,190)$ | $(889,292)$ | $(447,898)$ |
| 7 Subtotal | $(8,183,186)$ | $(4,607,443)$ | $(3,575,743)$ |
| 8 Net periodic postretirement benefit cost/(income) | $(11,221,488)$ | $(5,502,397)$ | $(5,719,091)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Total benefit cost | $(11,221,488)$ | $(5,502,397)$ | $(5,719,091)$ |
| B Assumptions |  |  |  |
| 1 Discount rate |  | 5.680\% | 5.680\% |
| 2 Expected long-term rate of return on plan assets |  | 5.600\% | 7.000\% |
| 3 Current health care cost trend rate |  | 6.500\% | 6.500\% |
| 4 Ultimate health care cost trend rate |  | 5.000\% | 5.000\% |
| 5 Year of ultimate trend rate |  | 2038 | 2038 |
| 6 Census date |  | 1-Jan-22 | 1-Jan-22 |
| C Plan Assets at Beginning of Year |  |  |  |
| 1 Fair value | 134,141,062 | 67,460,046 | 66,681,016 |
| 2 Market-related value | 150,279,796 | 74,859,962 | 75,419,834 |
| D Expected Cash Flows Net of Medicare Part D Subsidy |  |  |  |
| 1 Employer contributions | 0 | 0 | 0 |
| 2 Plan participants' contributions | 0 | 0 | 0 |
| 3 Benefits paid from Company assets | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 5,319,194 | 2,885,082 | 2,434,112 |
| E Amortization Period |  |  |  |
| 1 For gain/loss amortization, if applicable | N/A | 5.76743 | 5.97178 |
| 2 For new prior service cost bases, if any | N/A | 5.01377 | 4.77611 |

## WillisTowers Watson IIIIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans <br> Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Medical Total USD | Non-Union Medical Total USD | Union Medical Total USD |
| Participant Information - Census Date | 1-Jan-22 | 1-Jan-22 | 1-Jan-22 |
| A Participating Employees <br> 1 Number <br> 2 Average age <br> 3 Average credited service |  |  |  |
| B Retirees, Dependents and Surviving Spouses <br> 1 Retirees <br> 2 Average age <br> 3 Surviving spouses and surviving dependents <br> 4 Average age <br> 5 Total retirees, surviving spouses and surviving dependents <br> 6 Average age |  |  |  |
| C Other Participants 1 Number 2 Average age |  |  |  |
| Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| Amortization Details of Plan Amendment \#1 |  |  |  |
| 1 Net amount at 31-Dec-21 | $(311,640)$ | $(48,374)$ | $(263,266)$ |
| 2 Amortization amount during 2022 | 289,901 | 48,374 | 241,527 |
| 3 Effect of curtailments | 0 | 0 | 0 |
| 4 Other events | 0 | 0 | 0 |
| 5 Net amount at 31-Dec-22 | $(21,739)$ | - | $(21,739)$ |
| 6 Remaining amortization period | N/A | 0.00000 | 0.09000 |
| Amortization Details of Plan Amendment \#2 |  |  |  |
| 1 Net amount at 31-Dec-21 | $(19,766,138)$ | $(11,277,150)$ | $(8,488,988)$ |
| 2 Amortization amount during 2022 | 6,824,257 | 3,718,151 | 3,106,106 |
| 3 Effect of curtailments | 0 | 0 | 0 |
| 4 Other events | 0 | 0 | 0 |
| 5 Net amount at 31-Dec-22 | $(12,941,881)$ | $(7,558,999)$ | $(5,382,882)$ |
| 6 Remaining amortization period | N/A | 2.03000 | 1.73000 |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| A Reconciliation of Amounts Recognized in Statement of Financial Position |  |  |  |
| 1 Accumulated postretirement benefit obligation | $(78,770,797)$ | $(41,071,897)$ | $(37,698,900)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 134,141,062 | 67,460,046 | 66,681,016 |
| 3 Net balance sheet asset/(liability) | 55,370,265 | 26,388,149 | 28,982,116 |
| 4 Net prior service cost/(credit) | $(12,963,620)$ | $(7,558,999)$ | $(5,404,621)$ |
| 5 Net loss/(gain) | (6,692,924) | $(5,215,012)$ | $(1,477,912)$ |
| 6 Accumulated Employer contributions in excess of net periodic benefit cost | 35,713,721 | 13,614,138 | 22,099,583 |
| B Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| 1 Amount as of beginning of year | 26,324,131 | 9,134,458 | 17,189,673 |
| 2 Net periodic postretirement benefit (cost)/income | 9,303,285 | 4,393,375 | 4,909,910 |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 0 | 0 | 0 |
| 5 Benefits paid from Company assets | 86,305 | 86,305 | 0 |
| 6 Other recognized loss/(gain) | 0 | 0 | 0 |
| 7 Other adjustments | 0 | 0 | 0 |
| 8 Amount as of end of year | 35,713,721 | 13,614,138 | 22,099,583 |

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MP Exhibit

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Dental Total USD | Non-Union Dental Total USD | Union Dental Total USD |
| Disclosed Benefit Cost | 31-Dec-22 | 31-Dec-22 | 31-Dec-22 |
| A Disclosed Benefit Cost |  |  |  |
| 1 Employer service cost | 271,175 | 132,178 | 138,997 |
| 2 Interest cost | 471,934 | 256,525 | 215,409 |
| 3 Expected return on plan assets | $(924,371)$ | $(402,806)$ | $(521,565)$ |
| 4 Subtotal | $(181,262)$ | $(14,103)$ | $(167,159)$ |
| 5 Net prior service cost/(credit) amortization | 0 | 0 | 0 |
| 6 Net loss/(gain) amortization | $(197,082)$ | $(197,082)$ | 0 |
| 7 Subtotal | $(197,082)$ | $(197,082)$ | 0 |
| 8 Net periodic postretirement benefit cost/(income) | $(378,344)$ | $(211,185)$ | $(167,159)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Disclosed net benefit cost | $(378,344)$ | $(211,185)$ | $(167,159)$ |
| B Presentation of Benefit Cost Pursuant to ASC 715-20 |  |  |  |
| 1 Employer service cost | 271,175 | 132,178 | 138,997 |
| 2 Other components of net periodic benefit cost | $(649,519)$ | $(343,363)$ | $(306,156)$ |
| 3 Other adjustments to net benefit cost | 0 | 0 | 0 |
| 4 Disclosed net benefit cost | $(378,344)$ | $(211,185)$ | $(167,159)$ |
| C Assumptions Used to Determine Benefit Cost |  |  |  |
| 1 Discount rate |  | 3.090\% | 3.090\% |
| 2 Expected long-term rate of return on plan assets |  | 4.800\% | 6.000\% |
| 3 Current health care cost trend rate |  | 5.000\% | 5.000\% |
| 4 Ultimate health care cost trend rate |  | 4.500\% | 4.500\% |
| 5 Year of ultimate trend rate |  | 2038 | 2038 |
| Balance Sheet Asset/(Liability) |  |  |  |
| A Development of Balance Sheet Asset/(Liability) |  |  |  |
| 1 Accumulated postretirement benefit obligation (APBO) | $(12,278,876)$ | $(6,643,837)$ | $(5,635,039)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 15,718,324 | 7,915,822 | 7,802,502 |
| 3 Net balance sheet asset/(liability) | 3,439,448 | 1,271,985 | 2,167,463 |
| B Current and Noncurrent Classification |  |  |  |
| 1 Noncurrent asset | 3,439,448 | 1,271,985 | 2,167,463 |
| 2 Current liability | 0 | 0 | 0 |
| 3 Noncurrent liability | 0 | 0 | 0 |
| 4 Net balance sheet asset/(liability) | 3,439,448 | 1,271,985 | 2,167,463 |
| C Reconciliation of Net Balance Sheet Asset/(Liability) |  |  |  |
| 1 Net balance sheet asset/(liability) at end of prior fiscal year | 3,731,981 | 1,209,763 | 2,522,218 |
| 2 Employer service cost | $(271,175)$ | $(132,178)$ | $(138,997)$ |
| 3 Interest cost | $(471,934)$ | $(256,525)$ | $(215,409)$ |
| 4 Expected return on plan assets | 924,371 | 402,806 | 521,565 |
| 5 Plan amendments | 0 | 0 | 0 |
| 6 Actuarial gain/(loss) | $(512,929)$ | 8,985 | $(521,914)$ |
| 7 Employer contributions | 0 | 0 | 0 |
| 8 Benefits paid directly by the Company, net of retiree contributions | 39,134 | 39,134 | 0 |
| 9 Medicare Part D subsidy on benefits paid during the year | 0 | 0 | 0 |
| 10 Acquisitions/divestitures | 0 | 0 | 0 |
| 11 Curtailments | 0 | 0 | 0 |
| 12 Settlements (if settled using corporate cash) | 0 | 0 | 0 |
| 13 Special/contractual termination benefits | 0 | 0 | 0 |
| 14 Net balance sheet asset /(liability) at end of current fiscal year | 3,439,448 | 1,271,985 | 2,167,463 |
| D Assumptions and Dates Used for Disclosure |  |  |  |
| 1 Discount rate |  | 5.680\% | 5.680\% |
| 2 Current health care cost trend rate |  | 6.000\% | 6.000\% |
| 3 Ultimate health care cost trend rate |  | 5.000\% | 5.000\% |
| 4 Year of ultimate trend rate |  | 2038 | 2038 |
| 5 Census date |  | 1-Jan-22 | 1-Jan-22 |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Dental Total USD | Non-Union Dental Total USD | Union Dental Total USD |
| Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| A Accumulated Other Comprehensive (Income)/Loss <br> 1 Net prior service cost/(credit) <br> 2 Net loss/(gain) | 0 $(4,030,064)$ | 0 $(2,931,956)$ | 0 $(1,098,108)$ |
| $3 \begin{aligned} & \text { Accumulated other comprehensive (income)/loss } \\ & \text { [Before adjustment for tax effects] }\end{aligned}$ | $(4,030,064)$ | $(2,931,956)$ | $(1,098,108)$ |
| B Development of Accumulated Other Comprehensive (Income)/Loss (AOCI) |  |  |  |
| 1 AOCl at prior fiscal year end | $(4,740,075)$ | $(3,120,053)$ | $(1,620,022)$ |
| 2 Amounts amortized during the year | 0 | 0 | 0 |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 197,082 | 197,082 | 0 |
| 3 Occurring during the year | 0 | 0 | 0 |
| a. Net prior service cost/(credit) | 0 | 0 | 0 |
| b. Net loss/(gain) | 512,929 | $(8,985)$ | 521,914 |
| 4 Amounts recognized due to curtailment/settlement | 0 | 0 | 0 |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 0 | 0 | 0 |
| 5 AOCl at current fiscal year end | (4,030,064) | $(2,931,956)$ | $(1,098,108)$ |
| Additional Disclosure Information |  |  |  |
| A Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 Fully eligible actives | 1,817,464 | 938,550 | 878,914 |
| 2 Other actives | 1,209,491 | 558,908 | 650,583 |
| 3 Retirees, dependents and surviving spouses | 9,251,921 | 5,146,379 | 4,105,542 |
| 4 Accumulated postretirement benefit obligation | 12,278,876 | 6,643,837 | 5,635,039 |

B Expected Future Benefit Payments, Net of Retiree Contributions, and Medicare Part D Subsidies Benefit payments

1 During fiscal year ending December 31, 2023
2 During fiscal year ending December 31, 2024
3 During fiscal year ending December 31, 2025

| 630,646 | 358,274 | 272,372 |
| ---: | ---: | ---: |
| 666,970 | 377,249 | 289,721 |
| 701,814 | 395,517 | 306,297 |
| 734,980 | 412,473 | 322,507 |
| 767,036 | 428,580 | 338,456 |
| $4,264,017$ | $2,347,032$ | $1,916,985$ |

C Expected Contributions during Fiscal Year ending December 31, 2023
1 Employer
2 Plan participants

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Dental Total | Non-Union Dental Total | Union Dental Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Changes in Disclosed Plan Obligations and Assets |  |  |  |
| A Change in Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 APBO at prior fiscal year end | 15,584,651 | 8,482,209 | 7,102,442 |
| 2 Employer service cost | 271,175 | 132,178 | 138,997 |
| 3 Interest cost | 471,934 | 256,525 | 215,409 |
| 4 Actuarial loss/(gain) | $(3,506,701)$ | $(1,907,672)$ | $(1,599,029)$ |
| 5 Plan participants' contributions | 427,305 | 242,608 | 184,697 |
| 6 Benefits paid from plan assets | $(930,354)$ | $(522,877)$ | $(407,477)$ |
| 7 Benefits paid from Company assets | $(39,134)$ | $(39,134)$ | 0 |
| 8 Medicare Part D subsidy | 0 | 0 | 0 |
| 9 Administrative expenses paid | 0 | 0 | 0 |
| 10 Plan amendments | 0 | 0 | 0 |
| 11 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 12 Curtailments | 0 | 0 | 0 |
| 13 Settlements | 0 | 0 | 0 |
| 14 Special/contractual termination benefits | 0 | 0 | 0 |
| 15 APBO at current fiscal year end | 12,278,876 | 6,643,837 | 5,635,039 |
| B Change in Plan Assets |  |  |  |
| 1 Fair value of plan assets at prior fiscal year end | 19,316,632 | 9,691,972 | 9,624,660 |
| 2 Actual return on plan assets | $(3,095,259)$ | (1,495,881) | $(1,599,378)$ |
| 3 Employer contributions | 39,134 | 39,134 | 0 |
| 4 Plan participants' contributions | 427,305 | 242,608 | 184,697 |
| 5 Benefits paid | $(969,488)$ | $(562,011)$ | $(407,477)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Fair value of plan assets at current fiscal year end | 15,718,324 | 7,915,822 | 7,802,502 |
| Reconciliation of Net Balances |  |  |  |
| A Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| 1 Net amount at prior fiscal year end | 0 | 0 | 0 |
| 2 Amortization amount | 0 | 0 | 0 |
| 3 Plan amendments | 0 | 0 | 0 |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Other events | 0 | 0 | 0 |
| 6 Net amount at current fiscal year end | 0 | 0 | 0 |
| B Reconciliation of Net Loss/(Gain) |  |  |  |
| 1 Net amount at prior fiscal year end | $(4,740,075)$ | $(3,120,053)$ | $(1,620,022)$ |
| 2 Amount recognized | 197,082 | 197,082 | 0 |
| 3 Experience loss/(gain) | 512,929 | $(8,985)$ | 521,914 |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Effect of settlements | 0 | 0 | 0 |
| 6 Other events | 0 | 0 | 0 |
| 7 Net amount at current fiscal year end | (4,030,064) | (2,931,956) | $(1,098,108)$ |


| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Dental Total | Non-Union Dental Total | Union Dental Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Development of Plan Assets for Benefit Cost |  |  |  |
| A Reconciliation of Fair Value of Plan Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-21 | 19,316,632 | 9,691,972 | 9,624,660 |
| 2 Actual return on plan assets | $(3,095,259)$ | $(1,495,881)$ | $(1,599,378)$ |
| 3 Employer contributions | 39,134 | 39,134 | 0 |
| 4 Plan participants' contributions | 427,305 | 242,608 | 184,697 |
| 5 Benefits paid, net of retiree contributions | $(969,488)$ | $(562,011)$ | $(407,477)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Fair value of plan assets at 31-Dec-22 | 15,718,324 | 7,915,822 | 7,802,502 |
| B Reconciliation of Market-Related Value of Plan Assets |  |  |  |
| 1 Market-related value of plan assets at 31-Dec-21 | 17,396,227 | 8,572,218 | 8,824,009 |
| 2 Actual return on plan assets | 666,662 | 357,142 | 309,520 |
| 3 Employer contributions | 39,134 | 39,134 | 0 |
| 4 Plan participants' contributions | 427,305 | 242,608 | 184,697 |
| 5 Benefits paid, net of retiree contributions | $(969,488)$ | $(562,011)$ | $(407,477)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Market-related value of plan assets at 31-Dec-22 | 17,559,840 | 8,649,091 | 8,910,749 |
| C Rate of Return on Invested Assets |  |  |  |
| 1 Weighted invested assets | 19,065,107 | 9,551,837 | 9,513,270 |
| 2 Rate of return | (16.235\%) | (15.661\%) | (16.812\%) |
| D Investment Loss/(Gain) |  |  |  |
| 1 Actual return | $(3,095,259)$ | $(1,495,881)$ | $(1,599,378)$ |
| 2 Expected return | 1,029,284 | 458,488 | 570,796 |
| 3 Loss/(gain) | 4,124,543 | 1,954,369 | 2,170,174 |
| E Market-Related Value of Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-22 | 15,718,324 | 7,915,822 | 7,802,502 |
| a. Deferred amount from measurement year ending 31-Dec-22 |  |  |  |
| i. (Gain)/Loss | 4,124,543 | 1,954,369 | 2,170,174 |
| ii. Percent recognized | N/A | 20.000\% | 20.000\% |
| iii. Percent deferred | N/A | 80.000\% | 80.000\% |
| iv. Deferred amount | 3,299,634 | 1,563,495 | 1,736,139 |
| b. Deferred amount from measurement year ending 31-Dec-21 |  |  |  |
| i. (Gain)/Loss | $(1,089,864)$ | $(677,755)$ | $(412,109)$ |
| ii. Percent recognized | N/A | 40.000\% | 40.000\% |
| iii. Percent deferred | N/A | 60.000\% | 60.000\% |
| iv. Deferred amount | $(653,918)$ | $(406,653)$ | $(247,265)$ |
| c. Deferred amount from measurement year ending 31-Dec-20 |  |  |  |
| i. (Gain)/Loss | $(1,035,429)$ | $(554,609)$ | $(480,820)$ |
| ii. Percent recognized | N/A | 60.000\% | 60.000\% |
| iii. Percent deferred | N/A | 40.000\% | 40.000\% |
| iv. Deferred amount | $(414,172)$ | $(221,844)$ | $(192,328)$ |
| d. Deferred amount from measurement year ending 31-Dec-19 |  |  |  |
| i. (Gain)/Loss | $(1,950,142)$ | $(1,008,647)$ | $(941,495)$ |
| ii. Percent recognized | N/A | 80.000\% | 80.000\% |
| iii. Percent deferred | N/A | 20.000\% | 20.000\% |
| iv. Deferred amount | $(390,028)$ | $(201,729)$ | $(188,299)$ |
| e. Deferred amount from measurement year ending 31-Dec-18 |  |  |  |
| i. (Gain) / Loss | 1,763,996 | 793,368 | 970,628 |
| ii. Percent recognized | N/A | 100.000\% | 100.000\% |
| iii. Percent deferred | N/A | 0.000\% | 0.000\% |
| iv. Deferred amount | 0 | 0 | 0 |
| f. Total deferred amount | 1,841,516 | 733,269 | 1,108,247 |
| 3 Market-related value of assets | 17,559,840 | 8,649,091 | 8,910,749 |

MP Exhibit

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Dental Total USD | Non-Union Dental Total USD | Union Dental Total USD |
| Summary and Comparison of Benefit Cost and Cash Flows | 31-Dec-23 | 31-Dec-23 | 31-Dec-23 |
| A Total Benefit Cost |  |  |  |
| 1 Employer service cost | 181,169 | 90,874 | 90,295 |
| 2 Interest cost | 679,530 | 367,195 | 312,335 |
| 3 Expected return on plan assets | $(1,088,536)$ | $(474,317)$ | (614,219) |
| 4 Subtotal | $(227,837)$ | $(16,248)$ | $(211,589)$ |
| 5 Net prior service cost/(credit) amortization | 0 | 0 | 0 |
| 6 Net loss/(gain) amortization | $(705,789)$ | $(485,540)$ | $(220,249)$ |
| 7 Subtotal | $(705,789)$ | $(485,540)$ | $(220,249)$ |
| 8 Net periodic postretirement benefit cost/(income) | $(933,626)$ | $(501,788)$ | $(431,838)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Total benefit cost | (933,626) | $(501,788)$ | $(431,838)$ |
| B Assumptions |  |  |  |
| 1 Discount rate |  | 5.680\% | 5.680\% |
| 2 Expected long-term rate of return on plan assets |  | 5.600\% | 7.000\% |
| 3 Current health care cost trend rate |  | 6.000\% | 6.000\% |
| 4 Ultimate health care cost trend rate |  | 5.000\% | 5.000\% |
| 5 Year of ultimate trend rate |  | 2038 | 2038 |
| 6 Census date |  | 1-Jan-22 | 1-Jan-22 |
| C Plan Assets at Beginning of Year |  |  |  |
| 1 Fair value | 15,718,324 | 7,915,822 | 7,802,502 |
| 2 Market-related value | 17,559,840 | 8,649,091 | 8,910,749 |
| D Expected Cash Flows Net of Medicare Part D Subsidy |  |  |  |
| 1 Employer contributions | 0 | 0 | 0 |
| 2 Plan participants' contributions | 0 | 0 | 0 |
| 3 Benefits paid from Company assets | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 630,646 | 358,274 | 272,372 |
| E Amortization Period |  |  |  |
| 1 For gain/loss amortization, if applicable | N/A | 5.76743 | 5.97178 |
| 2 For new prior service cost bases, if any | N/A | 5.01377 | 4.77611 |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Dental Total | Non-Union Dental Total | Union Dental Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Participant Information - Census Date | 1-Jan-22 | 1-Jan-22 | 1-Jan-22 |
| A Participating Employees <br> 1 Number <br> 2 Average age <br> 3 Average credited service |  |  |  |
| B Retirees, Dependents and Surviving Spouses <br> 1 Retirees <br> 2 Average age <br> 3 Surviving spouses and surviving dependents <br> 4 Average age <br> 5 Total retirees, surviving spouses and surviving dependents <br> 6 Average age |  |  |  |
| C Other Participants 1 Number 2 Average age |  |  |  |
| Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| Amortization Details of Plan Amendment \#1 |  |  |  |
| 1 Net amount at 31-Dec-21 | 0 | 0 | 0 |
| 2 Amortization amount during 2022 | 0 | 0 | 0 |
| 3 Effect of curtailments | 0 | 0 | 0 |
| 4 Other events | 0 | 0 | 0 |
| 5 Net amount at 31-Dec-22 | 0 | 0 | 0 |
| 6 Remaining amortization period | N/A | 0.00000 | 0.00000 |
| Amortization Details of Plan Amendment \#2 |  |  |  |
| 1 Net amount at 31-Dec-21 | 0 | 0 | 0 |
| 2 Amortization amount during 2022 | 0 | 0 | 0 |
| 3 Effect of curtailments | 0 | 0 | 0 |
| 4 Other events | 0 | 0 | 0 |
| 5 Net amount at 31-Dec-22 | 0 | 0 | 0 |
| 6 Remaining amortization period | N/A | 0.00000 | 0.00000 |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| A Reconciliation of Amounts Recognized in Statement of Financial Position |  |  |  |
| 1 Accumulated postretirement benefit obligation | $(12,278,876)$ | $(6,643,837)$ | $(5,635,039)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 15,718,324 | 7,915,822 | 7,802,502 |
| 3 Net balance sheet asset/(liability) | 3,439,448 | 1,271,985 | 2,167,463 |
| 4 Net prior service cost/(credit) | 0 | 0 | 0 |
| 5 Net loss/(gain) | $(4,030,064)$ | $(2,931,956)$ | $(1,098,108)$ |
| 6 Accumulated Employer contributions in excess of net periodic benefit cost | $(590,616)$ | $(1,659,971)$ | 1,069,355 |
| B Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| 1 Amount as of beginning of year | $(1,008,094)$ | $(1,910,290)$ | 902,196 |
| 2 Net periodic postretirement benefit (cost)/income | 378,344 | 211,185 | 167,159 |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 0 | 0 | 0 |
| 5 Benefits paid from Company assets | 39,134 | 39,134 | 0 |
| 6 Other recognized loss/(gain) | 0 | 0 | 0 |
| 7 Other adjustments | 0 | 0 | 0 |
| 8 Amount as of end of year | (590,616) | (1,659,971) | 1,069,355 |

ID: 493821343

MP Exhibit

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Life Total USD | Non-Union Life Total USD | Union Life Total USD |
| Disclosed Benefit Cost | 31-Dec-22 | 31-Dec-22 | 31-Dec-22 |
| A Disclosed Benefit Cost |  |  |  |
| 1 Employer service cost | 80,964 | 0 | 80,964 |
| 2 Interest cost | 743,404 | 395,586 | 347,818 |
| 3 Expected return on plan assets | $(785,036)$ | $(284,448)$ | $(500,588)$ |
| 4 Subtotal | 39,332 | 111,138 | $(71,806)$ |
| 5 Net prior service cost/(credit) amortization | $(402,663)$ | 0 | $(402,663)$ |
| 6 Net loss/(gain) amortization | 575,740 | 295,151 | 280,589 |
| 7 Subtotal | 173,077 | 295,151 | $(122,074)$ |
| 8 Net periodic postretirement benefit cost/(income) | 212,409 | 406,289 | $(193,880)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Disclosed net benefit cost | 212,409 | 406,289 | $(193,880)$ |
| B Presentation of Benefit Cost Pursuant to ASC 715-20 |  |  |  |
| 1 Employer service cost | 80,964 | 0 | 80,964 |
| 2 Other components of net periodic benefit cost | 131,445 | 406,289 | $(274,844)$ |
| 3 Other adjustments to net benefit cost | 0 | 0 | 0 |
| 4 Disclosed net benefit cost | 212,409 | 406,289 | $(193,880)$ |
| C Assumptions Used to Determine Benefit Cost |  |  |  |
| 1 Discount rate |  | 3.090\% | 3.090\% |
| 2 Expected long-term rate of return on plan assets |  | 4.800\% | 6.000\% |
| 3 Current health care cost trend rate |  | NA | NA |
| 4 Ultimate health care cost trend rate |  | NA | NA |
| 5 Year of ultimate trend rate |  | NA | NA |
| Balance Sheet Asset/(Liability) |  |  |  |
| A Development of Balance Sheet Asset/(Liability) |  |  |  |
| 1 Accumulated postretirement benefit obligation (APBO) | $(17,973,126)$ | $(9,656,703)$ | $(8,316,423)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 12,771,508 | 5,193,234 | 7,578,274 |
| 3 Net balance sheet asset/(liability) | $(5,201,618)$ | $(4,463,469)$ | $(738,149)$ |
| B Current and Noncurrent Classification |  |  |  |
| 1 Noncurrent asset | 0 | 0 | 0 |
| 2 Current liability | 0 | 0 | 0 |
| 3 Noncurrent liability | $(5,201,618)$ | $(4,463,469)$ | $(738,149)$ |
| 4 Net balance sheet asset/(liability) | $(5,201,618)$ | $(4,463,469)$ | $(738,149)$ |
| C Reconciliation of Net Balance Sheet Asset/(Liability) |  |  |  |
| 1 Net balance sheet asset/(liability) at end of prior fiscal year | $(8,430,408)$ | $(6,304,376)$ | $(2,126,032)$ |
| 2 Employer service cost | $(80,964)$ | 0 | $(80,964)$ |
| 3 Interest cost | $(743,404)$ | $(395,586)$ | $(347,818)$ |
| 4 Expected return on plan assets | 785,036 | 284,448 | 500,588 |
| 5 Plan amendments | 0 | 0 | 0 |
| 6 Actuarial gain/(loss) | 3,268,122 | 1,952,045 | 1,316,077 |
| 7 Employer contributions | 0 | 0 | 0 |
| 8 Benefits paid directly by the Company, net of retiree contributions | 0 | 0 | 0 |
| 9 Medicare Part D subsidy on benefits paid during the year | 0 | 0 | 0 |
| 10 Acquisitions/divestitures | 0 | 0 | 0 |
| 11 Curtailments | 0 | 0 | 0 |
| 12 Settlements (if settled using corporate cash) | 0 | 0 | 0 |
| 13 Special/contractual termination benefits | 0 | 0 | 0 |
| 14 Net balance sheet asset /(liability) at end of current fiscal year | (5,201,618) | $(4,463,469)$ | $(738,149)$ |
| D Assumptions and Dates Used for Disclosure |  |  |  |
| 1 Discount rate |  | 5.680\% | 5.680\% |
| 2 Current health care cost trend rate |  | NA | NA |
| 3 Ultimate health care cost trend rate |  | NA | NA |
| 4 Year of ultimate trend rate |  | NA | NA |
| 5 Census date |  | 1-Jan-22 | 1-Jan-22 |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Life Total | Non-Union Life Total | Union Life Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| A Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| 1 Net prior service cost/(credit) | $(181,201)$ | 0 | $(181,201)$ |
| 2 Net loss/(gain) | 3,188,852 | 2,748,764 | 440,088 |
| 3 Accumulated other comprehensive (income)/loss |  |  |  |
| B Development of Accumulated Other Comprehensive (Income)/Loss (AOCI) |  |  |  |
| 1 AOCl at prior fiscal year end | 6,448,850 | 4,995,960 | 1,452,890 |
| 2 Amounts amortized during the year | 0 | 0 | 0 |
| a. Net prior service (cost)/credit | 402,663 | 0 | 402,663 |
| b. Net (loss)/gain | $(575,740)$ | $(295,151)$ | $(280,589)$ |
| 3 Occurring during the year | 0 | - | 0 |
| a. Net prior service cost/(credit) | 0 | 0 | 0 |
| b. Net loss/(gain) | $(3,268,122)$ | $(1,952,045)$ | $(1,316,077)$ |
| 4 Amounts recognized due to curtailment/settlement | 0 | 0 | 0 |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 0 | 0 | 0 |
| 5 AOCI at current fiscal year end | 3,007,651 | 2,748,764 | 258,887 |
| Additional Disclosure Information |  |  |  |
| A Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 Fully eligible actives | 476,666 | 0 | 476,666 |
| 2 Other actives | 341,884 | 0 | 341,884 |
| 3 Retirees, dependents and surviving spouses | 17,154,576 | 9,656,703 | 7,497,873 |
| 4 Accumulated postretirement benefit obligation | 17,973,126 | 9,656,703 | 8,316,423 |
| B Expected Future Benefit Payments, Net of Retiree Contributions, and Medicare Part D Subsidies Benefit payments |  |  |  |
|  |  |  |  |
| 1 During fiscal year ending December 31, 2023 | 1,008,578 | 589,002 | 419,576 |
| 2 During fiscal year ending December 31, 2024 | 1,046,141 | 605,176 | 440,965 |
| 3 During fiscal year ending December 31, 2025 | 1,083,334 | 621,245 | 462,089 |
| 4 During fiscal year ending December 31, 2026 | 1,120,230 | 637,167 | 483,063 |
| 5 During fiscal year ending December 31, 2027 | 1,156,830 | 652,900 | 503,930 |
| 6 During fiscal years ending December 31, 2028 through December 31, 2032 | 6,301,589 | 3,488,113 | 2,813,476 |
| C Expected Contributions during Fiscal Year ending December 31, 2023 |  |  |  |
| 1 Employer | 0 | 0 | 0 |
| 2 Plan participants | 0 | 0 | 0 |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Life Total USD | Non-Union Life Total USD | Union Life Total USD |
| Changes in Disclosed Plan Obligations and Assets |  |  |  |
| A Change in Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 APBO at prior fiscal year end | 24,546,059 | 13,086,977 | 11,459,082 |
| 2 Employer service cost | 80,964 | 0 | 80,964 |
| 3 Interest cost | 743,404 | 395,586 | 347,818 |
| 4 Actuarial loss/(gain) | $(6,493,369)$ | $(3,305,959)$ | $(3,187,410)$ |
| 5 Plan participants' contributions | 85,106 | 44,372 | 40,734 |
| 6 Benefits paid from plan assets | $(989,038)$ | $(564,273)$ | $(424,765)$ |
| 7 Benefits paid from Company assets | 0 | 0 | 0 |
| 8 Medicare Part D subsidy | 0 | 0 | 0 |
| 9 Administrative expenses paid | 0 | 0 | 0 |
| 10 Plan amendments | 0 | 0 | 0 |
| 11 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 12 Curtailments | 0 | 0 | 0 |
| 13 Settlements | 0 | 0 | 0 |
| 14 Special/contractual termination benefits | 0 | 0 | 0 |
| 15 APBO at current fiscal year end | 17,973,126 | 9,656,703 | 8,316,423 |
| B Change in Plan Assets |  |  |  |
| 1 Fair value of plan assets at prior fiscal year end | 16,115,651 | 6,782,601 | 9,333,050 |
| 2 Actual return on plan assets | $(2,440,211)$ | $(1,069,466)$ | $(1,370,745)$ |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Plan participants' contributions | 85,106 | 44,372 | 40,734 |
| 5 Benefits paid | $(989,038)$ | $(564,273)$ | $(424,765)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Fair value of plan assets at current fiscal year end | 12,771,508 | 5,193,234 | 7,578,274 |
| Reconciliation of Net Balances |  |  |  |
| A Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| 1 Net amount at prior fiscal year end | $(583,864)$ | 0 | $(583,864)$ |
| 2 Amortization amount | 402,663 | 0 | 402,663 |
| 3 Plan amendments | 0 | 0 | 0 |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Other events | 0 | 0 | 0 |
| 6 Net amount at current fiscal year end | $(181,201)$ | 0 | $(181,201)$ |
| B Reconciliation of Net Loss/(Gain) |  |  |  |
| 1 Net amount at prior fiscal year end | 7,032,714 | 4,995,960 | 2,036,754 |
| 2 Amount recognized | $(575,740)$ | $(295,151)$ | $(280,589)$ |
| 3 Experience loss/(gain) | $(3,268,122)$ | $(1,952,045)$ | $(1,316,077)$ |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Effect of settlements | 0 | 0 | 0 |
| 6 Other events | 0 | 0 | 0 |
| 7 Net amount at current fiscal year end | 3,188,852 | 2,748,764 | 440,088 |

(Cutshall)

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Life Total | Non-Union Life Total | Union Life Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Development of Plan Assets for Benefit Cost |  |  |  |
| A Reconciliation of Fair Value of Plan Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-21 | 16,115,651 | 6,782,601 | 9,333,050 |
| 2 Actual return on plan assets | ( $2,440,211$ ) | $(1,069,466)$ | $(1,370,745)$ |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Plan participants' contributions | 85,106 | 44,372 | 40,734 |
| 5 Benefits paid, net of retiree contributions | $(989,038)$ | $(564,273)$ | $(424,765)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Fair value of plan assets at 31-Dec-22 | 12,771,508 | 5,193,234 | 7,578,274 |
| B Reconciliation of Market-Related Value of Plan Assets |  |  |  |
| 1 Market-related value of plan assets at 31-Dec-21 | 14,756,807 | 6,210,836 | 8,545,971 |
| 2 Actual return on plan assets | 459,334 | 147,306 | 312,028 |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Plan participants' contributions | 85,106 | 44,372 | 40,734 |
| 5 Benefits paid, net of retiree contributions | $(989,038)$ | $(564,273)$ | $(424,765)$ |
| 6 Administrative expenses paid | 0 | 0 | 0 |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Market-related value of plan assets at 31-Dec-22 | 14,312,209 | 5,838,241 | 8,473,968 |
| C Rate of Return on Invested Assets |  |  |  |
| 1 Weighted invested assets | 15,663,684 | 6,522,650 | 9,141,034 |
| 2 Rate of return | (15.579\%) | (16.396\%) | (14.996\%) |
| D Investment Loss/(Gain) |  |  |  |
| 1 Actual return | (2,440,211) | $(1,069,466)$ | $(1,370,745)$ |
| 2 Expected return | 861,549 | 313,087 | 548,462 |
| 3 Loss/(gain) | 3,301,760 | 1,382,553 | 1,919,207 |
| E Market-Related Value of Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-22 | 12,771,508 | 5,193,234 | 7,578,274 |
| a. Deferred amount from measurement year ending 31-Dec-22 |  |  |  |
| i. (Gain)/Loss | 3,301,760 | 1,382,553 | 1,919,207 |
| ii. Percent recognized | N/A | 20.000\% | 20.000\% |
| iii. Percent deferred | N/A | 80.000\% | 80.000\% |
| iv. Deferred amount | 2,641,408 | 1,106,042 | 1,535,366 |
| b. Deferred amount from measurement year ending 31-Dec-21 |  |  |  |
| ii. Percent recognized | N/A | 40.000\% | 40.000\% |
| iii. Percent deferred | N/A | 60.000\% | 60.000\% |
| iv. Deferred amount | $(478,642)$ | $(211,725)$ | $(266,917)$ |
| c. Deferred amount from measurement year ending 31-Dec-20 |  |  |  |
| i. (Gain)/Loss | $(836,521)$ | $(361,267)$ | $(475,254)$ |
| ii. Percent recognized | N/A | 60.000\% | 60.000\% |
| iii. Percent deferred | N/A | 40.000\% | 40.000\% |
| iv. Deferred amount | $(334,609)$ | $(144,507)$ | $(190,102)$ |
| d. Deferred amount from measurement year ending 31-Dec-19 |  |  |  |
| i. (Gain)/Loss | $(1,437,280)$ | $(524,013)$ | $(913,267)$ |
| ii. Percent recognized | N/A | 80.000\% | 80.000\% |
| iii. Percent deferred | N/A | 20.000\% | 20.000\% |
| iv. Deferred amount | $(287,456)$ | $(104,803)$ | $(182,653)$ |
| e. Deferred amount from measurement year ending 31-Dec-18 |  |  |  |
| i. (Gain)/Loss | 1,780,850 | 684,500 | 1,096,350 |
| ii. Percent recognized | N/A | 100.000\% | 100.000\% |
| iii. Percent deferred | N/A | 0.000\% | 0.000\% |
| iv. Deferred amount | 0 | 0 | 0 |
| f. Total deferred amount | 1,540,701 | 645,007 | 895,694 |
| 3 Market-related value of assets | 14,312,209 | 5,838,241 | 8,473,968 |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | Life Total USD | Non-Union Life Total USD | Union Life Total USD |
| Summary and Comparison of Benefit Cost and Cash Flows | 31-Dec-23 | 31-Dec-23 | 31-Dec-23 |
| A Total Benefit Cost |  |  |  |
| 1 Employer service cost | 45,717 | 0 | 45,717 |
| 2 Interest cost | 992,230 | 531,773 | 460,457 |
| 3 Expected return on plan assets | $(888,942)$ | $(310,449)$ | $(578,493)$ |
| 4 Subtotal | 149,005 | 221,324 | $(72,319)$ |
| 5 Net prior service cost/(credit) amortization | $(181,201)$ | 0 | $(181,201)$ |
| 6 Net loss/(gain) amortization | 81,752 | 81,752 | 0 |
| 7 Subtotal | $(99,449)$ | 81,752 | $(181,201)$ |
| 8 Net periodic postretirement benefit cost/(income) | 49,556 | 303,076 | $(253,520)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Total benefit cost | 49,556 | 303,076 | $(253,520)$ |
| B Assumptions |  |  |  |
| 1 Discount rate |  | 5.680\% | 5.680\% |
| 2 Expected long-term rate of return on plan assets |  | 5.600\% | 7.000\% |
| 3 Current health care cost trend rate |  | NA | NA |
| 4 Ultimate health care cost trend rate |  | NA | NA |
| 5 Year of ultimate trend rate |  | NA | NA |
| 6 Census date |  | 1-Jan-22 | 1-Jan-22 |
| C Plan Assets at Beginning of Year |  |  |  |
| 1 Fair value | 12,771,508 | 5,193,234 | 7,578,274 |
| 2 Market-related value | 14,312,209 | 5,838,241 | 8,473,968 |
| D Expected Cash Flows Net of Medicare Part D Subsidy |  |  |  |
| 1 Employer contributions | 0 | 0 | 0 |
| 2 Plan participants' contributions | 0 | 0 | 0 |
| 3 Benefits paid from Company assets | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 1,008,578 | 589,002 | 419,576 |
| E Amortization Period |  |  |  |
| 1 For gain/loss amortization, if applicable | N/A | 13.92127 | 5.97178 |
| 2 For new prior service cost bases, if any | N/A | 13.92127 | 5.97178 |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Postretirement Welfare Plans | Life Total | Non-Union Life Total | Union Life Total |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Participant Information - Census Date | 1-Jan-22 | 1-Jan-22 | 1-Jan-22 |
| A Participating Employees <br> 1 Number <br> 2 Average age <br> 3 Average credited service |  |  |  |
| B Retirees, Dependents and Surviving Spouses <br> 1 Retirees <br> 2 Average age <br> 3 Surviving spouses and surviving dependents <br> 4 Average age <br> 5 Total retirees, surviving spouses and surviving dependents <br> 6 Average age |  |  |  |
| C Other Participants 1 Number 2 Average age |  |  |  |
| Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| Amortization Details of Plan Amendment \#1 |  |  |  |
| 1 Net amount at 31-Dec-21 | $(583,864)$ | 0 | $(583,864)$ |
| 2 Amortization amount during 2022 | 402,663 | 0 | 402,663 |
| 3 Effect of curtailments | 0 | 0 | - |
| 4 Other events | 0 | 0 | 0 |
| 5 Net amount at 31-Dec-22 | $(181,201)$ | 0 | $(181,201)$ |
| 6 Remaining amortization period | N/A | N/A | 0.45001 |
| Amortization Details of Plan Amendment \#2 |  |  |  |
| 1 Net amount at 31-Dec-21 | 0 | 0 | 0 |
| 2 Amortization amount during 2022 | 0 | 0 | 0 |
| 3 Effect of curtailments | 0 | , | 0 |
| 4 Other events | 0 | 0 | 0 |
| 5 Net amount at 31-Dec-22 | 0 | 0 | 0 |
| 6 Remaining amortization period | N/A | 0.00000 | 0.00000 |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| A Reconciliation of Amounts Recognized in Statement of Financial Position |  |  |  |
| 1 Accumulated postretirement benefit obligation | $(17,973,126)$ | $(9,656,703)$ | $(8,316,423)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 12,771,508 | 5,193,234 | 7,578,274 |
| 3 Net balance sheet asset/(liability) | $(5,201,618)$ | $(4,463,469)$ | $(738,149)$ |
| 4 Net prior service cost/(credit) | $(181,201)$ | 0 | $(181,201)$ |
| 5 Net loss/(gain) | 3,188,852 | 2,748,764 | 440,088 |
| 6 Accumulated Employer contributions in excess of net periodic benefit cost | $(2,193,967)$ | $(1,714,705)$ | $(479,262)$ |
| B Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| 1 Amount as of beginning of year | $(1,981,558)$ | $(1,308,416)$ | $(673,142)$ |
| 2 Net periodic postretirement benefit (cost)/income | $(212,409)$ | $(406,289)$ | 193,880 |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 0 | 0 | 0 |
| 5 Benefits paid from Company assets | 0 | 0 | 0 |
| 6 Other recognized loss/(gain) | 0 | 0 | 0 |
| 7 Other adjustments | 0 | 0 | 0 |
| 8 Amount as of end of year | $(2,193,967)$ | (1,714,705) | $(479,262)$ |

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## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
|  | BNI Coal, LTD | BNI Coal, LTD | BNI Coal, LTD |
| BNI Coal | Total | Non-Union | Union |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Disclosed Benefit Cost | 31-Dec-22 | 31-Dec-22 | 31-Dec-22 |
| A Disclosed Benefit Cost |  |  |  |
| 1 Employer service cost | 77,894 | 32,315 | 45,579 |
| 2 Interest cost | 78,820 | 32,972 | 45,848 |
| 3 Expected return on plan assets | 0 | 0 | 0 |
| 4 Subtotal | 156,714 | 65,287 | 91,427 |
| 5 Net prior service cost/(credit) amortization | 0 | 0 | 0 |
| 6 Net loss/(gain) amortization | $(8,226)$ | $(3,623)$ | $(4,603)$ |
| 7 Subtotal | $(8,226)$ | $(3,623)$ | $(4,603)$ |
| 8 Net periodic postretirement benefit cost/(income) | 148,488 | 61,664 | 86,824 |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Other adjustments | 0 | 0 | 0 |
| 13 Disclosed net benefit cost | 148,488 | 61,664 | 86,824 |
| B Presentation of Benefit Cost Pursuant to ASC 715-20 |  |  |  |
| 1 Employer service cost | 77,894 | 32,315 | 45,579 |
| 2 Other components of net periodic benefit cost | 70,594 | 29,349 | 41,245 |
| 3 Other adjustments to net benefit cost | 0 | 0 | 0 |
| 4 Disclosed net benefit cost | 148,488 | 61,664 | 86,824 |
| C Assumptions Used to Determine Benefit Cost |  |  |  |
| 1 Discount rate | 3.090\% | 3.090\% | 3.090\% |
| 2 Expected long-term rate of return on plan assets | N/A | N/A | N/A |
| 3 Current health care cost trend rate | 5.660\% | 5.660\% | 5.660\% |
| 4 Ultimate health care cost trend rate | 4.500\% | 4.500\% | 4.500\% |
| 5 Year of ultimate trend rate | 2038 | 2038 | 2038 |
| Balance Sheet Asset/Liability) |  |  |  |
| A Development of Balance Sheet Asset/(Liability) |  |  |  |
| 1 Accumulated postretirement benefit obligation (APBO) | $(1,454,842)$ | $(585,020)$ | $(869,822)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 0 | - |  |
| 3 Net balance sheet asset/(liability) | $(1,454,842)$ | $(585,020)$ | $(869,822)$ |
| B Current and Noncurrent Classification |  |  |  |
| 1 Noncurrent asset | 0 | 0 | 0 |
| 2 Current liability | $(224,835)$ | $(66,907)$ | $(157,928)$ |
| 3 Noncurrent liability | $(1,230,007)$ | $(518,113)$ | $(711,894)$ |
| 4 Net balance sheet asset/(liability) | (1,454,842) | $(585,020)$ | $(869,822)$ |
| C Reconciliation of Net Balance Sheet Asset/(Liability) |  |  |  |
| 1 Net balance sheet asset/(liability) at end of prior fiscal year | $(2,779,590)$ | $(1,141,574)$ | $(1,638,016)$ |
| 2 Employer service cost | $(77,894)$ | $(32,315)$ | $(45,579)$ |
| 3 Interest cost | $(78,820)$ | $(32,972)$ | $(45,848)$ |
| 4 Expected return on plan assets | 0 | 0 | 0 |
| 5 Plan amendments | 0 | 0 | 0 |
| 6 Actuarial gain/(loss) | 1,307,065 | 565,049 | 742,016 |
| 7 Employer contributions | 174,397 | 56,792 | 117,605 |
| 8 Benefits paid directly by the Company, net of retiree contributions | 0 | 0 | 0 |
| 9 Medicare Part D subsidy on benefits paid during the year | 0 | 0 | 0 |
| 10 Acquisitions/divestitures | 0 | 0 | 0 |
| 11 Curtailments | 0 | 0 | 0 |
| 12 Settlements (if settled using corporate cash) | 0 | 0 | 0 |
| 13 Special/contractual termination benefits | 0 | 0 | 0 |
| 14 Other adjustments | 0 | 0 | 0 |
| 15 Net balance sheet asset /(liability) at end of current fiscal year | $(1,454,842)$ | $(585,020)$ | $(869,822)$ |
| D Assumptions and Dates Used for Disclosure |  |  |  |
| 1 Discount rate | 5.680\% | 5.680\% | 5.680\% |
| 2 Current health care cost trend rate | 6.500\% | 6.500\% | 6.500\% |
| 3 Ultimate health care cost trend rate | 5.000\% | 5.000\% | 5.000\% |
| 4 Year of ultimate trend rate | 2038 | 2038 | 2038 |
| 5 Census date | N/A | 1-Jan-22 | 1-Jan-22 |

## WillisTowers Watson InIIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
| BNI Coal | BNI Coal, LTD | BNI Coal, LTD | BNI Coal, LTD |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| A Accumulated Other Comprehensive (Income)/Loss |  |  |  |
| 1 Net prior service cost/(credit) | 0 | 0 | 0 |
| 2 Net loss/(gain) | $(1,637,204)$ | $(700,392)$ | $(936,812)$ |
| 3 |  |  |  |
| B Development of Accumulated Other Comprehensive (Income)/Loss (AOCI) |  |  |  |
| 1 AOCl at prior fiscal year end | $(338,365)$ | $(138,966)$ | $(199,399)$ |
| 2 Amounts amortized during the year |  |  |  |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 8,226 | 3,623 | 4,603 |
| 3 Occurring during the year |  |  |  |
| a. Net prior service cost/(credit) | 0 | 0 | 0 |
| b. Net loss/(gain) | $(1,307,065)$ | $(565,049)$ | $(742,016)$ |
| 4 Amounts recognized due to curtailment/settlement |  |  |  |
| a. Net prior service (cost)/credit | 0 | 0 | 0 |
| b. Net (loss)/gain | 0 | 0 | 0 |
| 5 Other adjustments | 0 | 0 | 0 |
| 5 AOCl at current fiscal year end | $(1,637,204)$ | $(700,392)$ | $(936,812)$ |
| Additional Disclosure Information |  |  |  |
| A Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 Fully eligible actives | 415,340 | 255,902 | 159,438 |
| 2 Other actives | 582,283 | 240,176 | 342,107 |
| 3 Retirees, dependents and surviving spouses | 457,219 | 88,942 | 368,277 |
| 4 Accumulated postretirement benefit obligation | 1,454,842 | 585,020 | 869,822 |
| B Expected Future Benefit Payments, Net of Retiree Contributions, and Medicare Part D Subsidies |  |  |  |
| Benefit payments |  |  |  |
| 1 During fiscal year ending December 31, 2023 | 231,132 | 68,781 | 162,351 |
| 2 During fiscal year ending December 31, 2024 | 209,516 | 61,095 | 148,421 |
| 3 During fiscal year ending December 31, 2025 | 164,420 | 73,473 | 90,947 |
| 4 During fiscal year ending December 31, 2026 | 152,958 | 66,414 | 86,544 |
| 5 During fiscal year ending December 31, 2027 | 154,519 | 57,475 | 97,044 |
| 6 During fiscal years ending December 31, 2028 through December 31, 2032 | 734,742 | 327,413 | 407,329 |
| C Expected Contributions during Fiscal Year ending December 31, 2023 |  |  |  |
| 1 Employer | 0 | 0 | 0 |
| 2 Plan participants | 0 | 0 | 0 |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
|  | BNI Coal, LTD | BNI Coal, LTD | BNI Coal, LTD |
| BNI Coal | Total | Non-Union | Union |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Changes in Disclosed Plan Obligations and Assets |  |  |  |
| A Change in Accumulated Postretirement Benefit Obligation (APBO) |  |  |  |
| 1 APBO at prior fiscal year end | 2,779,590 | 1,141,574 | 1,638,016 |
| 2 Employer service cost | 77,894 | 32,315 | 45,579 |
| 3 Interest cost | 78,820 | 32,972 | 45,848 |
| 4 Actuarial loss/(gain) | $(1,307,065)$ | $(565,049)$ | $(742,016)$ |
| 5 Plan participants' contributions | 94,475 | 30,765 | 63,710 |
| 6 Benefits paid from plan assets | 0 | 0 | 0 |
| 7 Benefits paid from Company assets | $(137,887)$ | $(44,902)$ | $(92,985)$ |
| 8 Medicare Part D subsidy | 0 | 0 | 0 |
| 9 Administrative expenses paid | $(130,985)$ | $(42,655)$ | $(88,330)$ |
| 10 Plan amendments | 0 | 0 | 0 |
| 11 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 12 Curtailments | 0 | 0 | 0 |
| 13 Settlements | 0 | 0 | 0 |
| 14 Special/contractual termination benefits | 0 | 0 | 0 |
| 15 Other adjustments | 0 | 0 | 0 |
| 16 APBO at current fiscal year end | 1,454,842 | 585,020 | 869,822 |
| B Change in Plan Assets |  |  |  |
| 1 Fair value of plan assets at prior fiscal year end | 0 | 0 | 0 |
| 2 Actual return on plan assets | 0 | 0 | 0 |
| 3 Employer contributions | 174,397 | 56,792 | 117,605 |
| 4 Plan participants' contributions | 94,475 | 30,765 | 63,710 |
| 5 Benefits paid | $(137,887)$ | $(44,902)$ | $(92,985)$ |
| 6 Administrative expenses paid | $(130,985)$ | $(42,655)$ | $(88,330)$ |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Other adjustments | 0 | 0 | 0 |
| 10 Fair value of plan assets at current fiscal year end | 0 | 0 | 0 |
| Reconciliation of Net Balances |  |  |  |
| A Reconciliation of Prior Service Cost/(Credit) Bases |  |  |  |
| 1 Net amount at prior fiscal year end | 0 | 0 | 0 |
| 2 Amortization amount | 0 | 0 | 0 |
| 3 Plan amendments | 0 | 0 | 0 |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Other events | 0 | 0 | 0 |
| 6 Net amount at current fiscal year end | 0 | 0 | 0 |
| B Reconciliation of Net Loss/(Gain) |  |  |  |
| 1 Net amount at prior fiscal year end | $(338,365)$ | $(138,966)$ | $(199,399)$ |
| 2 Amount recognized | 8,226 | 3,623 | 4,603 |
| 3 Experience loss/(gain) | $(1,307,065)$ | $(565,049)$ | $(742,016)$ |
| 4 Effect of curtailments | 0 | 0 | 0 |
| 5 Effect of settlements | 0 | 0 | 0 |
| 6 Other events | 0 | 0 | 0 |
| 7 Net amount at current fiscal year end | $(1,637,204)$ | $(700,392)$ | $(936,812)$ |

## WillisTowers Watson I.IIIII

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
|  | BNI Coal, LTD | BNI Coal, LTD | BNI Coal, LTD |
| BNI Coal | Total | Non-Union | Union |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Development of Plan Assets for Benefit Cost |  |  |  |
| A Reconciliation of Fair Value of Plan Assets |  |  |  |
| 1 Fair value of plan assets at 31-Dec-21 | 0 | 0 | 0 |
| 2 Actual return on plan assets | 0 | 0 | 0 |
| 3 Employer contributions | 174,397 | 56,792 | 117,605 |
| 4 Plan participants' contributions | 94,475 | 30,765 | 63,710 |
| 5 Benefits paid, net of retiree contributions | $(137,887)$ | $(44,902)$ | $(92,985)$ |
| 6 Administrative expenses paid | $(130,985)$ | $(42,655)$ | $(88,330)$ |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Other adjustments | 0 | 0 | 0 |
| 10 Fair value of plan assets at 31-Dec-22 | 0 | 0 | 0 |
| B Reconciliation of Market-Related Value of Plan Assets |  |  |  |
| 1 Market-related value of plan assets at 31-Dec-21 | 0 | 0 | 0 |
| 2 Actual return on plan assets | 0 | 0 | 0 |
| 3 Employer contributions | 174,397 | 56,792 | 117,605 |
| 4 Plan participants' contributions | 94,475 | 30,765 | 63,710 |
| 5 Benefits paid, net of retiree contributions | $(137,887)$ | $(44,902)$ | $(92,985)$ |
| 6 Administrative expenses paid | $(130,985)$ | $(42,655)$ | $(88,330)$ |
| 7 Acquisitions/(divestitures) | 0 | 0 | 0 |
| 8 Settlements | 0 | 0 | 0 |
| 9 Other adjustments | 0 | 0 | 0 |
| 10 Market-related value of plan assets at 31-Dec-22 | 0 | 0 | 0 |
| C Rate of Return on Invested Assets |  |  |  |
| 1 Weighted invested assets | 0 | 0 | 0 |
| 2 Rate of return | N/A | N/A | N/A |
| D Investment Loss/(Gain) |  |  |  |
| 1 Actual return | 0 | 0 | 0 |
| 2 Expected return | 0 | 0 | 0 |
| 3 Loss/(gain) | 0 | 0 | 0 |
| Summary and Comparison of Benefit Cost and Cash Flows | 31-Dec-23 | 31-Dec-23 | 31-Dec-23 |
| A Total Benefit Cost |  |  |  |
| 1 Employer service cost | 36,308 | 19,203 | 17,105 |
| 2 Interest cost | 76,071 | 31,276 | 44,795 |
| 3 Expected return on plan assets | 0 | 0 | 0 |
| 4 Subtotal | 112,379 | 50,479 | 61,900 |
| 5 Net prior service cost/(credit) amortization | 0 | 0 | 0 |
| $6 \mathrm{Net} \mathrm{loss/(gain)} \mathrm{amortization}$ | $(249,398)$ | $(111,818)$ | $(137,580)$ |
| 7 Subtotal | $(249,398)$ | $(111,818)$ | $(137,580)$ |
| 8 Net periodic postretirement benefit cost/(income) | $(137,019)$ | $(61,339)$ | $(75,680)$ |
| 9 Curtailment (gain)/loss | 0 | 0 | 0 |
| 10 Settlement (gain)/loss | 0 | 0 | 0 |
| 11 Special/contractual termination benefits | 0 | 0 | 0 |
| 12 Other adjustments | 0 | 0 | 0 |
| 13 Total benefit cost | $(137,019)$ | $(61,339)$ | $(75,680)$ |
| B Assumptions |  |  |  |
| 1 Discount rate | 5.680\% | 5.680\% | 5.680\% |
| 2 Expected long-term rate of return on plan assets | 6.500\% | 6.500\% | 6.500\% |
| 3 Current health care cost trend rate | 6.000\% | 5.000\% | 5.000\% |
| 4 Ultimate health care cost trend rate | 2037 | 2038 | 2038 |
| 5 Year of ultimate trend rate | 0 | 0 | 0 |
| 6 Census date | N/A | 1-Jan-22 | 1-Jan-22 |
| C Fair Value of Assets at Beginning of Year | 0 | 0 | 0 |
| D Expected Cash Flows Net of Medicare Part D Subsidy |  |  |  |
| 1 Employer contributions | 0 | 0 | 0 |
| 2 Plan participants' contributions | 0 | 0 | 0 |
| 3 Benefits paid from Company assets | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 231,132 | 68,781 | 162,351 |
| E Amortization Period |  |  |  |
| 1 For gain/loss amortization, if applicable | N/A | 5.74051 | 6.17701 |
| 2 For new prior service cost bases, if any | N/A | 4.73242 | 4.64314 |

## WillisTowers Watson Inl|lill

| ALLETE, Inc. |  |  |  |
| :---: | :---: | :---: | :---: |
|  | BNI Coal, LTD | BNI Coal, LTD | BNI Coal, LTD |
| BNI Coal | Total | Non-Union | Union |
| Disclosure for Fiscal Year Ending 31-Dec-22 under US GAAP | USD | USD | USD |
| Participant Information - Census Date | N/A | 1-Jan-22 | 1-Jan-22 |
| A Participating Employees |  |  |  |
| 1 Number | 21 | 10 | 11 |
| 2 Average age | 58.38 | 58.80 | 58.00 |
| 3 Average credited service | 23.26 | 24.74 | 21.92 |
| B Retirees, Dependents and Surviving Spouses |  |  |  |
| 1 Retirees | 37 | 11 | 26 |
| 2 Average age | 67.57 | 68.82 | 67.04 |
| 3 Surviving spouses and surviving dependents | 25 | 6 | 19 |
| 4 Average age | 66.32 | 67.17 | 66.05 |
| 5 Total retirees, surviving spouses and surviving dependents | 62 | 17 | 45 |
| 6 Average age | 67.06 | 68.24 | 66.62 |
| C Other Participants |  |  |  |
| 1 Number | 0 | 0 | 0 |
| 2 Average age | N/A | N/A | N/A |
| Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| A Reconciliation of Amounts Recognized in Statement of Financial Position |  |  |  |
| 1 Projected Benefit Obligation (PBO) | $(1,454,842)$ | $(585,020)$ | $(869,822)$ |
| 2 Fair value of plan assets, excluding receivable contributions | 0 | 0 | 0 |
| 3 Net balance sheet asset/(liability) | (1,454,842) | $(585,020)$ | $(869,822)$ |
| 4 Net prior service cost/(credit) | 0 | 0 | 0 |
| 5 Net loss/(gain) | $(1,637,204)$ | $(700,392)$ | $(936,812)$ |
| 6 Accumulated Employer contributions in excess of net periodic benefit cost | $(3,092,046)$ | $(1,285,412)$ | $(1,806,634)$ |
| B Accumulated Contributions in Excess of Net Periodic Benefit Cost |  |  |  |
| 1 Amount as of beginning of year | $(3,117,955)$ | $(1,280,540)$ | $(1,837,415)$ |
| 2 Net periodic postretirement benefit (cost)/income | $(148,488)$ | $(61,664)$ | $(86,824)$ |
| 3 Employer contributions | 0 | 0 | 0 |
| 4 Benefits paid from plan assets | 0 | 0 | 0 |
| 5 Benefits paid from Company assets | 174,397 | 56,792 | 117,605 |
| 6 Other recognized loss/(gain) | 0 | 0 | 0 |
| 7 Other adjustments | 0 | 0 | 0 |
| 8 Amount as of end of year | $(3,092,046)$ | $(1,285,412)$ | $(1,806,634)$ |

[^25]
# Statement of actuarial assumptions, methods and data sources 

Plan Sponsor

ALLETE, Inc. and Affiliated Companies

## Statement of Assumptions

The assumptions disclosed in this Appendix are for the fiscal year ending December 31, 2022 financial reporting and the fiscal year 2023 benefit cost.

## Assumptions and methods for other postretirement benefit cost purposes

## Economic Assumptions

## Rate of return on assets for

\author{

- Non-Union <br> - Union
}
5.60\% (Post-tax)
7.00\% (Tax-free)


## Discount rate

As required by the U.S. GAAP accounting standard, the discount rate based on high quality corporate bonds (AA and AAA) is used to determine the obligations and service cost, and thus the net periodic benefit cost for the plan. Because these assumptions are required by the U.S. GAAP accounting standard, and reflect current market conditions (specifically, the market conditions as of the measurement date) they may from time to time be inconsistent with other economic assumptions used in the valuation, which may reflect both current economic conditions and assumed future conditions.

The return on assets shown above is gross of investment expenses and administrative expenses assumed to be paid from the trust.

|  | Current Retirees | Future Retirees |
| :---: | :---: | :---: |
| Participation | $100 \%$ of retirees are assumed to maintain coverage the following year. 100\% of retirees electing coverage who have spouses are assumed to elect spousal coverage. | $90 \%$ of future eligible retirees are assumed to elect coverage at retirement date. 100\% of retirees electing coverage who have spouses are assumed to elect spousal coverage. |
|  |  | Future pre-65 retirees will elect to participate in the following plans: <br> 50\% -- Copay plan <br> 30\% -- HSA Blue Plan <br> 20\% -- HSA Green Plan |
| Percentage married | Based on valuation census data | 85\% of males; $65 \%$ of females |
| Spouse age | Based on valuation census data | Male participants: Spouse 2 years younger |
|  |  | Female participants: Spouse 3 years older |

## Demographic Assumptions

## Mortality:

- Healthy mortality rates

Base Mortality Table [Male Table used for males; Female Table used for Females]

1. Base table: Pri-2012
2. Base mortality table year: 2012
3. Table type: Non-Union: No Collar, Union: Blue Collar
4. Healthy or Disabled: Healthy
5. Table weighting: Headcount
6. Blending of annuitants and non-annuitants: Separate rates for annuitants and non-annuitants (based on Employees table)
7. Blending of retirees and contingent annuitants: Separate rates for retirees/contingent annuitants and contingent survivors

Mortality Improvement Scale

1. Base scale: MP-2021
2. Projection Type: Generational

## Termination

The rates at which participants are assumed to terminate employment by age are shown below:

Percentage assumed to leave during the year

| Attained Age | Non-Union | Union |
| :---: | :---: | :---: |
| 20 | $10.40 \%$ | $10.40 \%$ |
| 25 | $7.20 \%$ | $7.20 \%$ |
| 30 | $4.88 \%$ | $3.05 \%$ |
| 35 | $2.18 \%$ | $2.18 \%$ |
| 40 | $1.73 \%$ | $1.73 \%$ |
| 45 | $1.53 \%$ | $1.53 \%$ |
| 50 | $1.40 \%$ | $1.40 \%$ |
| 54 | $1.15 \%$ | $1.15 \%$ |
| $55+$ | $0.00 \%$ | $0.00 \%$ |

## Retirement

Rates at which participants are assumed to retire by age are shown below:

| Percentage assumed to retire during the year |  |  |
| :---: | :---: | :---: |
| Age | Non-Union | Union |
| Under 55 | $3.0 \%$ | $4.0 \%$ |
| 55 | $10.0 \%$ | $8.0 \%$ |
| 56 | $10.0 \%$ | $8.0 \%$ |
| 57 | $20.0 \%$ | $9.0 \%$ |
| 58 | $20.0 \%$ | $14.0 \%$ |
| 59 | $20.0 \%$ | $14.0 \%$ |
| 60 | $33.0 \%$ | $25.0 \%$ |
| 61 | $33.0 \%$ | $40.0 \%$ |
| 62 | $50.0 \%$ | $65.0 \%$ |
| 63 | $40.0 \%$ | $55.0 \%$ |
| 64 | $40.0 \%$ | $40.0 \%$ |
| 65 | $65.0 \%$ | $85.0 \%$ |
| 66 | $35.0 \%$ | $50.0 \%$ |
| 67 | $35.0 \%$ | $50.0 \%$ |
| $68+$ | $100.0 \%$ | $100.0 \%$ |

$\qquad$

## Trend Rates

Health care cost trend rate: The trend rates of incurred claims represent the rate of increase in employer claim payments:

Percentage increase in following year's claim cost

| Year | Medical | Dental |
| :---: | :---: | :---: |
| 2023 | $6.500 \%$ | $6.000 \%$ |
| 2024 | $6.375 \%$ | $6.000 \%$ |
| 2025 | $6.250 \%$ | $6.000 \%$ |
| 2026 | $6.125 \%$ | $6.000 \%$ |
| 2027 | $6.000 \%$ | $6.000 \%$ |
| 2028 | $5.909 \%$ | $5.910 \%$ |
| 2029 | $5.818 \%$ | $5.820 \%$ |
| 2030 | $5.727 \%$ | $5.730 \%$ |
| 2031 | $5.636 \%$ | $5.640 \%$ |
| 2032 | $5.545 \%$ | $5.550 \%$ |
| 2033 | $5.455 \%$ | $5.450 \%$ |
| 2034 | $5.364 \%$ | $5.360 \%$ |
| 2035 | $5.273 \%$ | $5.270 \%$ |
| 2036 | $5.182 \%$ | $5.180 \%$ |
| 2037 | $5.091 \%$ | $5.090 \%$ |
| $2038+$ | $5.000 \%$ | $5.000 \%$ |

Per Capita Claims Costs

## Basis for per capita claim cost assumptions

Retiree Contributions

Annual claims costs at age 65 including administrative costs are as follows:

| Average Per Capita Claims Cost |  |
| :--- | :---: |
| Category | FY2023 |
| Pre-Medicare Copay | $\$ 11,691$ |
| Pre-Medicare HSA Blue | $\$ 11,351$ |
| Pre-Medicare HSA Green | $\$ 10,525$ |
| Post-Medicare | $\$ 2,019$ |
| Dental | $\$ 503$ |


| Plan | FY2023 Contribution (Individual / Family) |
| :--- | :---: |
| Pre-Medicare Copay | $\$ 213 / \$ 466$ |
| Pre-Medicare HSA Blue | $\$ 218 / \$ 466$ |
| Pre-Medicare HSA Green | $\$ 205 / \$ 439$ |
| Post-Medicare | $\$ 51 / \$ 102$ |
| Dental | $\$ 18 / \$ 34$ |


| Morbidity | After application of the morbidity aging assumption based on Willis <br> Towers Watson's AgeDist model, the projected 2023 average <br> annual per capita claims costs including administrative expenses at <br> each age band are shown below. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Age | Copay | HSA Blue |  | HSA Green

## Additional Assumptions

## Administrative expenses

Administrative expenses and stop loss premiums are included in the pre-65 medical claims costs, and administrative expenses are included in the dental claims cost. Administrative expenses are assumed to be included in the post- 65 medical insured premium rate.

## Cash flow

- Timing of benefit payments
- Amount and timing of contributions

Funding policy

## Inclusion date

Benefit payments are assumed to be made uniformly throughout the year and, on average, at mid-year.

Contributions are assumed to be made uniformly throughout the year and, on average, at mid-year.

The postretirement medical plans' benefits are advance funded through separate VEBAs for union and non-union participants. Contributions to the accounts are made to the extent they are needed and are tax deductible.

The valuation date coincident with or next following the date on which the employee becomes a participant.

It was assumed there will be no new or rehired employees.

## Benefit commencement dates

- Retirement benefit

Decrement timing

Upon termination of employment
The assumptions used are collectively called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met, or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year. Retiree medical claims costs are based on the nearest age at the beginning of the year, to align with how claims costs tables are typically developed.

## Methods - Other Postretirement Benefit Cost and Funded Position

## Census date

## Measurement date

January 1, 2022
December 31, 2022
The benefit obligations are based on census data collected as of January 1, 2022. We have projected the benefit obligations forward to December 31, 2022, adjusting for benefit payments, expected growth in the benefit obligations, changes in key assumptions, and plan provisions, and any significant changes in the plan population. The projected benefit payments were developed based on January 1, 2022 census data and reflect the key assumptions and plan provisions at December 31, 2022, benefit payments during 2022, expected 2023 accruals, and any significant changes in plan demographics that occurred during the year.

Service cost and accumulated Costs are determined using the Projected Unit Credit Cost Method. postretirement benefit obligation

The annual service cost is equal to the present value of the portion of the projected benefit attributable to service during the upcoming year, and the Accumulated Postretirement Benefit Obligation (APBO) is equal to the present value of the portion of the projected benefit attributable to service before the measurement date. Service from the later of hire date, and age 40 (if eligible at age 50) or age 45 (if eligible at age 55), through the expected full eligibility date (age 50 or 55 and 10 years of service) is counted in allocating costs. Costs are allocated: pro rata over the service period described above.

APBO is measured by determining a portfolio of bonds, using the December 31, 2022 Willis Towers Watson BOND: Link model, that will provide the cash flows necessary to satisfy the projected benefit payments underlying the APBO determined using the methodology described above, and determining the market value of that portfolio. A single discount rate that equates the present value of those benefit payments to the market value of the bond portfolio is determined. Service cost is determined by discounting the
projected benefit payments underlying service cost, determined using the methodology described above, by the same discount rate determined above for the APBO. Interest cost is measured by applying the discount rate to the APBO.

Market-related value of assets
For the market-related value of assets, a smoothed actuarial value of assets is used, equal to a moving average market values in which investment income is recognized over a five-year period. Investment income qual to the expected return on plan assets as calculated for the prior year's expense is recognized immediately. Any difference between the actual investment income (on a market value basis) and the expected return is recognized over a five-year period ( $20 \%$ in the first year, $40 \%$ in the second year, and so on, until the full $100 \%$ is recognized in the fifth year). In addition, the market-related value of assets must be no greater than $120 \%$ and no less than $80 \%$ of the market value of assets.

## Amortization of unamortized amounts:

- Recognition of past service Amortization of net prior service cost/(credit) resulting from a plan cost/(credit)


## - Recognition of gains or losses

 change is included as a component of Net Periodic Benefit Cost/(Income) in the year first recognized and every year thereafter until it is fully amortized. The annual amortization payment is determined in the first year as the increase in PBO due to the plan change divided by the average remaining service period of active participants expected to receive benefits under the plan.However, when a plan change reduces the PBO, existing positive prior service costs are reduced or eliminated starting with the earliest established before a new prior service credit base is established.

Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions is included as a component of Net Periodic Postretirement Benefit Cost/(Income) for a year.

If, as of the beginning of the year, that net gain or loss exceeds $10 \%$ of the greater of the APBO and the market-related value of plan assets, the amortization is that excess divided by the average remaining service period of active plan participants (except the nonunion life insurance plan which amortizes over the average expected future lifetime of inactive employees.) Amortization periods are determined separately for medical, dental, and life insurance benefits.

Under this methodology, the gain/loss amounts recognized in AOCl are not expected to be fully recognized in benefit cost until the plan is terminated (or an earlier event, like a settlement, triggers recognition) because the periods over which the amounts are amortized is redetermined each year and amounts that fall within the corridor described above are not amortized.

## Benefits not valued

The Surest Plan is available beginning January 1, 2023. At the direction of the plan sponsor, this plan was not included in the valuation due to low enrollment.

## Sources of Data and Other Information

The plan sponsor, furnished participant data and claims data as of 1/1/2022. Information on assets, contributions and plan provisions was supplied by the plan sponsor. Data and other information were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, the data was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for deferred taxes. Any deferred tax effects in AOCI should be determined in consultation with ALLETE's tax advisors and auditors. Willis Towers Watson used information supplied by ALLETE regarding the postretirement benefit asset, postretirement benefit liability, and amounts recognized in accumulated other comprehensive income as of the end of the 2022 fiscal year.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

## Assumptions Rationale - Significant Economic Assumptions

Please see the letter delivered January 2023 for additional details.

## Assumptions Rationale - Significant Demographic Assumptions

Please see the letter delivered January 2023 for additional details.

## Source of Prescribed Methods

Accounting methods The methods used for accounting purposes as described in Appendix A, including the method of determining the market-related value of plan assets, are "prescribed methods set by another party", as defined in the actuarial standards of practice (ASOPs). As required by U.S. GAAP, these methods were selected by the plan sponsor.

## Changes in Assumptions, Methods and Estimation Techniques

## Change in assumptions since prior valuation

- The discount rate changed from $3.09 \%$ to $5.68 \%$.
- Assumed per capita claims costs were updated to reflect recent plan experience for pre-65 retirees
- Retiree contribution rates were updated to reflect actual rates for 2023.
- The healthcare cost trend rate and premium trend rate schedules were updated. The expected plan distribution amongst future pre-65 retirees was updated
- The long-term rate of return assumption was changed to $5.60 \%$ for non-union and $7.00 \%$ for union for purposes of determining fiscal year ending December 31, 2023 expense.


## Change in methods since prior valuation

Change in estimation techniques since prior valuation

None.

None

## Model Descriptions and Disclosures in accordance with ASOP No. 56

## Quantify

Quantify is the Willis Towers Watson centrally developed, tested and maintained Global actuarial valuation system. It is used to perform valuations of clients' benefit plans.

Quantify provides the ability to process data, calculate benefits and value benefit liabilities, develop results using applicable standards, and generate client reports.

Quantify parameters provide significant flexibility to model populations and plan designs. Various demographic, economic and benefit related assumptions exist for users to model multiple demographic and economic situations.

Plan liabilities are calculated based on standard actuarial techniques, developing actuarially reasonable results using the population and parameters entered. The calculation and presentation of liabilities in Quantify relies on the assumptions used and the reasonability of the assumptions selected.

Quantify incorporates standard liability methodologies that are intended to reasonably reflect a variety of economic or demographic conditions. The model itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence.

Quantify is designed specifically for these purposes, and we know of no material limitations that would prevent the system from being suitable for these intended purposes. The actuaries

## Quantify FR

BOND: Link
signing this report have relied on the actuaries who develop, test and maintain this system, and have also performed a limited review of results to ensure that system parameters have been set appropriately and plan provisions coded correctly.

Quantify Financial Reporting (FR) is intended to calculate funding results, accounting results and produce the associated client reports under selected accounting standards. The calculations and reports are based on various user specified inputs including liability results and asset values.

Quantify FR develops valuation results for various accounting and funding purposes using standard actuarial techniques.

Calculation of disclosure liabilities and results are based on roll forward liabilities.

Liability roll-forwards are used in accounting scenarios where the date as of which liabilities are valued does not coincide with the fiscal year measurement date. The roll-forwards consist of adjusting liabilities for the passage of time.

The estimate of the following year's expense is calculated based on the obligations and assets used for disclosure and incorporates service cost that may be based on a projection in the associated Quantify liability run, depending on the relationship of the liability valuation date to the fiscal year.

The Roll Forward accounting calculations assume that applicable rules will not change during the roll-forward period Actuaries make adjustments to the data, plan provisions and assumptions reflected in the calculation of the liabilities that are rolled forward so that the results reflect conditions at the measurement date, and/or make similar adjustments to the results of the roll forward, including reflecting any changes in applicable accounting standards.

RATE: Link is a methodology to develop spot rates to be used for liability and cost measurements related to employee benefit plans. The same core methodology is used to develop all RATE: Link curves. The RATE: Link process develops term structures of interest rates from corporate bond data for each covered geography (e.g., the [U.S.] for this valuation).

The construction of RATE: Link yield curves relies on bond data collected as of the measurement date.

Information regarding quoted bond prices, yields and other bond related data is from Bloomberg Finance L.P.
U.S. BOND: Link is a methodology to assist with the selection of discount rates used in liability and cost measurements related to employee benefit plans. Discount rates are derived by identifying a theoretical settlement portfolio of high-quality corporate bonds

## Expected Return Estimator

SWIFT
sufficient to provide for a plan's projected benefit payments. The single interest rate is then determined that results in a discounted value of the plan's benefit payments that equals the market value of the selected bond portfolio.

Updated BOND: Link models are developed monthly as of the last day of the month. The construction of a BOND: Link model relies on bond data collected as of the measurement date. Parameters provide the user the ability to control aspects of the model. The model output allows the user to see the effects of those parameters.

Information regarding quoted bond prices, yields and other bond related data is from Bloomberg Finance L.P.

The Expected Return Estimator is used to help inform the choice of an expected return assumption (e.g., as one data point to consider) for returns on the assets of the trust.

The tool depends on the capital market assumptions chosen at the starting date of the simulation. These assumptions reflect currently prevailing capital market conditions, assumed future conditions ("normative conditions"), and the transition from the current conditions to the normative ones.

The assumed normative conditions incorporate a blend of historical capital market data and future expectations. The sources consulted in the determination of normative levels include practitioners in our global actuarial and investment consulting practices, plan sponsors, investment managers, economists, and academics.

Swift is intended to develop projections of plan (pension and OPRB plans) and/or asset values based on various user specified inputs. These amounts are then used to develop contribution and cost results under selected accounting standards and funding regulations. The time horizon for the analysis is 10 full future years.

The parameters provide a great deal of flexibility to model populations and plan designs. Various demographic and economic assumptions exist for users to model multiple demographic and economic scenarios. The Swift model for liabilities is a simplified alternative to using a full valuation system to develop projections of plan liabilities. The assumptions used to control the projected asset values are intended to be flexible enough to model a variety of scenarios reflecting the investment mix of the plan modeled.

Plan liabilities are initially projected based on standard actuarial techniques for a roll-forward based on the population/design parameters entered. The liabilities are then adjusted with inputs

## RPEC Model Implementation Tools

providing their sensitivity to various economic experience and valuation assumptions.

Assets are projected on a monthly basis reflecting the data, calculated cash flows, and input assumptions.

The model itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence.

Funding and accounting calculations assume that applicable rules will not change during the forecast horizon.

Certain details are not reflected in the model. For example, special events (curtailments, settlements, termination benefits) are not included in the standard accounting calculations. Additionally, the model does not support interim remeasurements of benefit cost. Actuaries make adjustments to the data, plan provisions and assumptions reflected in the calculation of the liabilities that are projected forward so that the results reflect conditions at the measurement date, and/or make similar adjustments to the results of the projection, including reflecting any changes in applicable accounting standards.

The MIM-2021 Model Implementation Tools are used to construct a mortality improvement scale is intended to produce future mortality improvement rates by age, year and gender based on historical mortality experience data, certain model inputs and a graduation algorithm to create a smooth transition from historical rates to projected rates. The Retirement Plans Experience Committee of the Society of Actuaries (RPEC) collects the data, defines the input parameters, develops and maintains the model. The RPEC annually publishes an update to this model for use by actuaries, and we have relied on the 2021 version of this model.

The input parameters that can be used as published or modified by the user include long-term improvement rate, horizontal (by age) convergence period, diagonal (by year of birth) convergence period, convergence blending percentages and initial slope constraint.

AgeDist is a spreadsheet tool that applies relative cost factors by age to average per capita costs (pre and post 65) and census weights to produce age-graded plan costs for pre- and post-65 populations. The average per capita costs and census weights are provided as inputs to the tool which is then combined with a morbidity curve to produce a set of weighted average agerelated costs that equal the average. The age-graded costs are used in the actuarial valuation.

The morbidity curve was developed from a broad set of claims data aggregated by age and blended and may not reflect your specific morbidity. The model does not evaluate the average per
capita costs or census weights for reasonableness or consistency.

## HealthMAPS

## PUT

HealthMAPS includes rating manuals and software for medical, dental, prescription drugs, state mandated benefits, specific stop loss and aggregate stop loss. The rating manuals and software enable the user to produce premium rates by type of coverage for specific benefit configurations. HealthMAPS is most commonly used as a tool for estimating the cost of medical and dental benefits or for estimating the effect of a change in plan provisions for use in other models and projections, most notably the Pricing and Underwriting Tool (PUT). HealthMAPS relies on underlying claims continuance tables developed from historic IBM Marketscan database data. This data includes national claims averages rather than client-specific information.

The Pricing and Underwriting Tool (PUT) develops projected premium equivalent rates, employee contributions, and COBRA rates for self-insured employer health plans (medical, prescription drugs, dental, and vision). The tool develops rates by plan or in aggregate leveraging historic claims, enrollment, and plan design and administrative fee data for an employer. The model allows flexibility to incorporate plan design changes, seasonality, and multiple methods of estimating incurred claims amounts from paid claims data.

## Summary of Principal Other Postretirement Benefit Plan Provisions

## Substantive Plan Provisions

The most recent change reflected in the following substantive plan provisions was adopted on December 31, 2019 and effective January 1, 2020.

Eligibility for Participation

Eligibility for Benefits

Attainment of age 40 for participants reaching age 50 with 10 years of service by December 31, 2011 and attainment of age 45 for participants that do not reach age 50 with 10 years of service by December 31, 2011 Employees hired after January 31, 2011 are not eligible to participate in the postretirement medical or dental plans but remain eligible for postretirement life insurance benefits.

Age 50 with ten or more years of service, or age 65 with five or more years of service for participants reaching age 50 with 10 years of service by December 31, 2011. Age 55 with ten or more years of service, or age 65 with five or more years of service for participants reaching age 55 with 10 years of service after December 31, 2011. Must make required contributions.

Non-union employees retiring after December 31, 2015 will not receive life insurance benefits.

## Medical Benefits

## Retiree contributions

Set annually to cover $25 \%$ of plan costs for pre-65 retirees and $30 \%$ of plan costs for post-65 retirees.

Under age 65 benefits

|  | Copay Plan |  | Blue Plan |  | Green Plan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Network | Out-of-Network | Network | Out-of-Network | Network | Out-of-Network |
| Deductible | \$2,000 Individual, \$4,000 Family | \$4,000 Individual, \$8,000 Family | $\begin{gathered} \$ 3,000 \\ \text { Individual, } \\ \$ 6,000 \text { Family } \end{gathered}$ | \$4,200 Individual, \$8,200 Family | \$4,500 Individual, \$9,000 Family | $\begin{gathered} \$ 5,500 \\ \text { Individual, } \\ \$ 11,000 \text { Family } \end{gathered}$ |
| Prescription Deductible | Prescriptions subject to plan deductibles above |  | Prescriptions subject to plan deductibles above |  | Prescriptions subject to plan deductibles above |  |
| Out-of-Pocket Limit | \$5,000 Individual, \$10,000 Family | \$10,000 Individual, \$20,000 Family | \$4,000 Individual, \$8,000 Family | \$5,000 Individual, \$10,000 Family | $\begin{array}{c\|} \hline \$ 6,000 \\ \text { Individual, } \\ \$ 12,000 \text { Family } \end{array}$ | $\begin{gathered} \$ 7,000 \\ \text { Individual, } \\ \$ 14,000 \text { Family } \end{gathered}$ |
| Annual HSA Funding | N/A |  | \$600 Individual, \$1,200 Family |  | \$600 Individual, \$1,200 Family |  |
| Plan Coinsurance | 80\% | 70\% | 80\% | 70\% | 80\% | 70\% |
| Physician <br> Services | $80 \%$ after deductible | $70 \%$ after deductible | $80 \%$ after deductible | $70 \%$ after deductible | $80 \%$ after deductible | $70 \%$ after deductible |
| Virtual Visits | $\$ \underset{\text { visit }}{\$ 25 \text { copay per }}$ | Not covered | $80 \%$ after deductible | Not covered | 80\% after deductible | Not covered |
| Preventative Care | 100\% | Not covered | 100\% | 100\% | 100\% | 100\% |
| Urgent Care | $\$ 75$ copay per visit | $70 \%$ after deductible | 80\% after deductible | $70 \%$ after deductible | 80\% after deductible | $70 \%$ after deductible |
| Emergency Room and Ambulance | $80 \%$ after deductible | $80 \%$ after in-network deductible | $80 \%$ after deductible | $80 \%$ after in-network deductible | 80\% after deductible | $80 \%$ after in-network deductible |
| Pharmacy Generic | \$10 copay |  | \$10 copay after deductible |  | \$10 copay after deductible |  |
| Pharmacy Brand Name | \$40 copay |  | 20\% after deductible, max of \$35 |  | 20\% after deductible, max of \$35 |  |
| Pharmacy -Non-Preferred | \$80 copay |  | 20\% after deductible, max of \$60 |  | 20\% after deductible, max of \$60 |  |
| Pharmacy Specialty | \$120 copay |  | 20\% after deductible, max of \$120 |  | 20\% after deductible, max of \$120 |  |
| Home Delivery <br> - Generic | \$25 copay | N/A | \$25 copay after deductible | N/A | \$25 copay after deductible | N/A |
| Home Delivery <br> - Brand Name | \$100 copay | N/A | $20 \%$ after deductible, max of $\$ 87.50$ | N/A | $\begin{gathered} 20 \% \text { after } \\ \text { deductible, max } \\ \text { of } \$ 87.50 \end{gathered}$ | N/A |
| Home Delivery <br> - Non- <br> Preferred | \$120 copay | N/A | $20 \%$ after deductible, max of $\$ 150$ | N/A | $20 \%$ after deductible, max of $\$ 150$ | N/A |

Age 65 and older benefits

Annual Out-of-Pocket Maximum: $\$ 500$ Deductible: None

Office Visit (PCP): \$5 copay
Office Visit (Specialist): \$10 copay
Lab/X-ray: \$0 copay
Hospital Inpatient: \$50 copay per admit
Hospital Outpatient: $\$ 25$ copay
PT/OT/ST: \$0 copay
Emergency Room: \$100 copay
Urgent Care: $\$ 15$ copay
Skilled Nursing: \$0 (100-day max)
Part B Drugs: \$10 copay
Prescription Drugs: 20\% coinsurance

## Dental Benefits

Retiree contributions
Benefits

Set annually to cover $40 \%$ of plan costs.
Plan Coinsurance: 100\% for diagnostic and preventive services, $80 \%$ for basic services and $50 \%$ for major services. Orthodontia not covered.

Annual Deductible: $\$ 25$ per individual; $\$ 75$ per family; waived for diagnostic and preventive services.

Annual Benefit Maximum: \$1,000

## Life Insurance Benefits

Postretirement contributions

Benefits

None.

Retirements after December 31, 2018 :
Life Insurance Benefits for Union
(1) Flat $\$ 15,000$ benefit for retirements after 12/31/2018 for SWLP employees
(2) Flat $\$ 20,000$ benefit for retirements after 12/31/2019 for MP (i.e. non-SWLP) employees

## Future Plan Changes

No future plan changes were recognized in determining postretirement welfare cost.

## Changes in Benefits Valued Since Prior Year

Deductibles and the out of pocket maximums for the pre-65 Copay plan were increased. Medical and Rx deductibles for the pre-65 Blue and Green plans were modified. The impact on the claim costs are reflected in the latest claim cost estimates.
pwc

## Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of ALLETE, Inc.

## Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheet of ALLETE, Inc. and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of income, of comprehensive income, of equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes and financial statement schedule listed in the index appearing under Item $15(\mathrm{a})(2)$ (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

## Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other
procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management's Report on Internal Control over Financial Reporting, management has excluded New Energy from its assessment of internal control over financial reporting as of December 31, 2022, because it was acquired by the Company in a purchase business combination during 2022. We have also excluded New Energy from our audit of internal control over financial reporting. New Energy is a wholly-owned subsidiary whose total assets and total revenues excluded from management's assessment and our audit of internal control over financial reporting represent $1 \%$ and $5 \%$, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2022.

## Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

## Accounting for the Effects of Regulatory Matters

As described in Note 4 to the consolidated financial statements, the Company's regulated utility operations are subject to accounting standards for the effects of certain types of regulation. As of December 31, 2022, there was $\$ 467$ million of regulatory assets and $\$ 550$ million of regulatory liabilities recorded. Regulatory assets represent incurred costs that have been deferred as they are probable for recovery in customer rates. Regulatory liabilities represent obligations to make refunds to customers and amounts collected in rates for which the related costs have not yet been incurred. Management assesses quarterly whether regulatory assets and liabilities meet the criteria for probability of future recovery or deferral. As disclosed by management, these standards require the Company to reflect the effect of regulatory decisions in its financial
statements. This assessment considers factors such as, but not limited to, changes in the regulatory environment and recent rate orders to other regulated entities under the same jurisdiction. If future recovery or refund of costs becomes no longer probable, the assets and liabilities would be recognized in current period net income or other comprehensive income.

The principal consideration for our determination that performing procedures relating to the Company's accounting for the effects of regulatory matters is a critical audit matter is the significant judgment by management in determining the recoverability of costs; this in turn led to a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating audit evidence obtained related to the recoverability of costs.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's implementation of new regulatory orders, changes to existing regulatory orders, and assessing the recoverability of costs. These procedures also included, among others, evaluating (i) the reasonableness of management's assessment of impacts arising from correspondence with regulators and changes in laws and regulations, (ii) management's judgments related to the recoverability of regulatory assets and the establishment of regulatory liabilities, and (iii) the sufficiency of the disclosures in the consolidated financial statements. Testing the regulatory assets and liabilities involved considering the provisions and formulas outlined in rate orders, other regulatory correspondence, and application of relevant regulatory precedents.

## PricewaterhouseCoopers LLP

Minneapolis, Minnesota
February 16, 2023
We have served as the Company's auditor since 1963.


[^0]:    ${ }^{1}$ A summary of allocation factors used across the Company for purposes of calculating the Minnesota Jurisdictional totals is provided in Volume 3, Schedules B-16 to B-19 and C-13 to C-16.

[^1]:    ${ }^{2}$ About the FASB, Fin. Accounting Standards BD., https://www.fasb.org/jsp/\%20FASB/Page/SectionPage\&cid=1176154526495 (last visited Aug. 14, 2019).
    3 Summary of Statement No. 158, Fin. Accounting Standards Bd., available at https://www.fasb.org/summary/stsum158.shtml.

[^2]:    ${ }^{4}$ See In the Matter of the Application of Minn. Power for Auth. to Increase Rates for Elec. Serv. in Minn., Docket No. E015/GR-21-355, Direct Testimony of Nancy Campbell at 19 (May 10, 2022).

[^3]:    ${ }^{5}$ Mercer was ALLETE's actuary through year end 2021.

[^4]:    ${ }^{6}$ The main pension expense components are: 1) Service Cost, 2) Interest Cost, 3) Expected Return on Plan Assets, 4) Amortization of Prior Service Cost, and 5) Amortization of Net Gain or Loss.

[^5]:    ${ }^{7}$ RANDAL D. CARTER DIRECT at 31 (Nov. 2, 2009).
    ${ }^{8}$ Randal d. CARTER REBUTTAL at 6 (Apr. 29, 2010).
    ${ }^{9}$ Findings of Fact, Conclusions, and Order at 24 (Nov. 2, 2010).
    ${ }^{10}$ Cutshall direct at 40 (Nov. 2, 2016).
    ${ }^{11}$ Cutshall rebuttal at 25 (Jun. 29, 2017).
    ${ }^{12}$ NANCY A. CAMPBELL SURREBUTTAL at 17 (Jul. 21, 2017).
    ${ }^{13}$ Cutshall direct at 46 (Nov. 1, 2021).
    ${ }^{14}$ NANCY A. CAMPBELL SURREBUTTAL at 2 (Jun. 6, 2022).
    ${ }^{15}$ Findings of FACT, CONCLUSIONS, AND ORDER at 80 (Feb. 23, 2023).

[^6]:    ${ }^{16}$ See Direct Schedule B-3(IR).
    ${ }^{17}$ In the Matter of the Application of Minn. Power for Auth. to Increase Rates for Elec. Serv. in Minn., Docket No. E015/GR-16-664, Findings of Fact, Conclusions, and Order at 16 (Mar. 12, 2018); In the Matter of the Application of Minn. Power for Auth. to Increase Rates for Elec. Serv. in Minn., Docket No. E015/GR-21-335, Findings of Fact, Conclusions, and Order at 9 (Feb. 28, 2023).

[^7]:    18 In the Matter of Minn. Power's Petition for Approval of Deferred Accounting Related to Pension Plan Contributions and Expenses, Docket No. E-015/M-11-1264, ORDER DENYING Petition at 2 (Mar. 11, 2013).

[^8]:    ${ }^{19}$ ASC 715-30-35-3 and 4.

[^9]:    ${ }^{20}$ In the Matter of the Application of Minn. Power for Auth. to Increase Rates for Elec. Serv. in Minn., Docket No. E015/GR-21-335, MP Exhibit $\qquad$ (Cutshall), Direct Schedule 3.

[^10]:    ${ }^{21}$ See Bluefield Waterworks \& Improvement Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679, 692 (1923) (stating that a "public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public").

[^11]:    ${ }^{22}$ See MP Exhibit $\qquad$ (Cutshall), Direct Schedule 10.

[^12]:    ${ }^{23}$ In the Matter of the Application of Minn. Power for Auth. to Increase Rates for Elec. Serv. in Minn., Docket No. E015/GR-21-335, Findings of FACT, Conclusions, And Order at 9 (February 28, 2023).
    ${ }^{24}$ Id.
    ${ }^{25} I d$. at 8 .

[^13]:    ${ }^{26}$ See MP Exhibit $\qquad$ (Cutshall), Direct Schedule 1, column Z.

[^14]:    ${ }^{27}$ See MP Exhibit ___ (Cutshall), Direct Schedule 7, page 1: "Disclosed Benefit Cost," Section A, line 3.
    ${ }^{28}$ Example provided by Mercer explaining how investment earnings on pension plan assets affect pension expense. Also filed In the Matter of the Application of Minn. Power for Auth. To Increase Rates for Elec. Serv. in Minn., Docket No. E-015/GR-21-335, MP Exhibit $\qquad$ (Cutshall), Direct Schedule 14.

[^15]:    ${ }^{29}$ In the Matter of the Application of Minn. Power for Auth. to Increase Rates for Elec. Serv. in Minn., Docket No. E015/GR-21-335, ALJ REPORT at 60 (Sept. 1, 2022).

[^16]:    ${ }^{30}$ In the Matter of Minnesota Power's Petition for Approval of its 2011 Transmission Cost Recovery Rider Factor, Docket No. E-015/M-11-695, ORDER (Nov. 12, 2013).
    ${ }^{31}$ In the Matter of the Application of Minn. Power for Auth. to Increase Rates for Elec. Serv. in Minn., Docket No. E015/GR-21-335, FIndings of FACT, CONCLUSIONS, AND ORDER at 9 (Feb. 28, 2023).

[^17]:    ${ }^{32}$ See, e.g., N.M. Atty. Gen. v. N.M. Pub. Regulation Comm'n, 359 P.3d 133, 138-40 (N.M. 2015) (authorizing inclusion of prepayments for pension expenses in rate base with a return because the utility is "out-of-pocket for such costs" until they are recovered from customers); Ind. Office of Util. Consumer Counselor, 7 N.E.3d 1025, 2014 WL 934350, at * 12 (Ind. Ct. App. 2014) (unpublished) (upholding inclusion of prepaid pension asset in rate base with a return because the "asset amounted to working capital that benefited the ratepayers by reducing the total pension costs needed in [the utility's] revenue requirement"); R.I. Consumers' Council v. Smith, 322 A.2d 17 (R.I. 1974) (authorizing inclusion in rate base of insurance premium prepayments, which reduce the cost of premiums for ratepayers); In the Matter of Advice No. 912-Gas Filed by Pub. Serv. Co. of Colorado to Roll the Pipeline Sys. Integrity Adjustment Costs into Base Rates Beginning in 2019 \& Increase Rates for All Nat. Gas Sales \& Transportation Servs. by Implementing A Gen. Rate Schedule Adjustment in the Company's Colorado P.U.C. No. 6-Gas Tariff, to Become Effective July 3, 2017., No. 17AL-0363G, 2021 WL 3023053, at *4 (Co. P.S.C. July 12,2021 ) (implementing district court order directing the commission to include prepaid pension asset in rate base because "regulated utilities must be permitted to earn 'a reasonable return on value of property used at the time it is being used to render the service[,]" and excluding the prepaid pension asset from rate base would "deprive [the utility] and its shareholders of their constitutional right to earn a reasonable return on their investment."); In re Rocky Mountain Power, 2014 WL 7526282, at *14, *36 (Wyo. P.S.C. 2014) (agreeing utility should recover financing costs of its prepaid pension asset by including the asset in the rate base and earning a return on it); In re Potomac Elec. Power Co., 263 P.U.R.4th 1, $\mathbb{1} 13$ (D.C. P.S.C. Jan. 30, 2008 ) (finding investorsupplied cash contributions created a prepaid pension asset that should earn a return); In re Ky.-Am. Water Co., No. 97-034, 1997 WL 34863470 (Ky. P.S.C. Sept. 30, 1997).
    ${ }^{33}$ See MP Exhibit $\qquad$ (Cutshall), Direct Schedule 4.

[^18]:    ${ }^{34}$ N.M. Atty. Gen. v. N.M. Pub. Regulation Comm'n, 359 P.3d 133, 137-38 (N.M. 2015) (citing S. Co. Servs., Inc., 122 FERC ब 61,218, at 62,235 (2008)) (order on tariff filing) (finding it generally appropriate to include pension prepayments in rate base because "utility is out-of-pocket for such costs until they are recovered from ratepayers and is therefore entitled to recover its cost of financing such prepaid expenses"), order clarified by 128 FERC【 61,276 (2009); In re Rocky Mountain Power, 2014 WL 7526282, at *14, *36 (a "prepaid pension asset represents [a utility's] contributions to its pension ... plans in excess of what is expensed to that time" and the utility "finances the asset with a combination of debt and equity financing").
    ${ }^{35}$ Spire Missouri, Inc. v. Pub. Svc. Comm. of Mo., 618 S.W.3d 225, 235-36 (Mo. 2021).

[^19]:    ${ }^{36}$ See Public Service Company of Colorado v. The Public Utilities Commission of the State of Colorado, Case No. 19CV31427, Order at 18 (Denver County District Court, Mar. 12, 2020).
    ${ }^{37}$ In the Matter of the Application of Northern States Power Company, d/b/a Xcel Energy, for Authority to Increase Rates for Electric Service in the State of Minnesota, OAH 22-2500-37994, MPUC E-002/GR-21-630, MPUC E-002/M-21-748, FIndings of Fact, CONCLUSIONS OF LAW AND RECOMMENDATIONS, paragraphs 316-317 at 55.

[^20]:    ${ }^{38}$ In the Matter of the Accounting and Ratemaking Effects of the Statement of Fin. Accounting Standards, Docket U-999/CI-92-96, Order Adopting Accounting Standard and Allowing Deferred Accounting at 7 (Sept. 22, 1992).
    ${ }^{39} \mathrm{Id}$. at 4.
    ${ }^{40} \mathrm{Id}$.
    ${ }^{41}$ In the Matter of Xcel's Petition for Approval to Discontinue Funding of Tax Advantaged Extern Fund (VEBA Fund) for Retiree Medical Costs and the Withdrawal of the Accumulated VEBA Fund Balance over a Five-Year Period, Docket No. E,G-002/M-02-2188, Order Approving Petition with Modification and Requiring Compliance Filing at 1 (Oct. 17, 2003) (citing the Commission's Order in Docket No. U-999/CI-92-96).
    ${ }^{42}$ In the Matter of the Application of Minn. Power for Auth. to Change its Schedule of Rates for Retail Elec. Serv. in the State of Minn., Docket No. E-015/GR-94-001, Direct Testimony of Bruce E. Gagnon at 8 (Jan. 3, 1994).

[^21]:    ${ }^{43}$ In the Matter of Minn. Power's Petition for Approval of Deferred Accounting Related to Pension Plan Contributions and Expenses, Docket No. E-015/M-11-1264, Reply Comments (Jun. 27, 2012).
    ${ }^{44}$ In the Matter of Minn. Power's Petition for Approval of Deferred Accounting Related to Pension Plan Contributions and Expenses, Docket No. E-015/M-11-1264, Order Denying Petition (Mar. 11, 2013).
    ${ }^{45}$ Id. at 2.

[^22]:    ${ }^{46}$ See MP Exhibit___ (Cutshall), Direct Schedule 9.

[^23]:    *Gross returns are displayed and are not reduced by Plan administrative expenses which are expected to be 30-40 bps

[^24]:    *Gross returns are displayed and are not reduced by any Plan administrative expenses

[^25]:    ID: 865316284

