Climate Enterprises

Executive Summary

Actuarial Team 5

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The AOFF Consulting, Inc. actuarial team performed a study of retirement and termination experience at Climate Enterprises in response to unexpected demographic movement in the pension plan. The results of this experience study were used to test the validity of current actuarial assumptions used in the funding valuations of Climate Enterprises' pension plan. Based on the experience study conducted from the valuation data extracts from the last six valuation years, we have concluded that modification of these assumptions is necessary. In order for Climate Enterprises to set aside contributions today that will satisfy promised benefits to retirees in the future, we have proposed new actuarial assumptions for Active Retirement Rates, Terminated Vested Retirement Rates, and Active Termination Rates.

External Factors Considered

In addition to utilizing actual experience rates, we considered the influences of the new political climate and policy changes.

- Healthcare Costs: In response to President Trump's statement that the government will soon stop funding cost-sharing reductions, insurers are increasing premiums. Healthcare costs will soon be too expensive, and we suspect more participants will wait to retire until after 65 so that Medicare will cover their healthcare costs.
- Social Security: Social Security benefits will likely decrease for future retirees due to the persistent trend of its fund deficit. We suspect more people eligible for retirement will postpone in the hopes of saving more money.

Methodology

During our experience study, we calculated the actual rates of retirement for participants who were active during ages 55-70 for years 2012 through 2017. We increased the range to include 66-70 year-olds to take into account the likelihood that all participants will be retired by age 70 instead of age 65 since they will continue to receive delayed retirement credits for Social Security until 70. We also calculated the actual rates of retirement for participants who were terminated vested during ages 55-74. We increased the range from the previous 55-65 year-olds again because more people are postponing retirement. Additionally, we suspect some participants have actually retired but forgot about their pension plans with Climate Enterprises, so they have not made a claim on their benefits. Finally, we calculated the actual rates of termination for active participants aged 24-54.

We used these calculated actual rates to determine a trend for each age group for each rate. After analyzing these trends and incorporating external factors that we predict will be in effect during 2018, we developed the updated assumptions for Active Retirement Rates, Terminated Vested Retirement Rates, and Active Termination Rates.

Cost Implications

The current assumptions resulted in consistent actuarial gains over the six valuation years when compared with the actual retirement and termination rates, pointing to the necessity to update these assumptions. The proposed assumptions have corrected these underestimated rates of retirement and overestimated rates of termination, resulting in an increased liability. Based on the proposed assumptions, Climate Enterprises must set aside more funds to sufficiently fund the present and future liabilities of promised benefits to current actives and retirees.

Active Retirement Rates

Age	Proposed
55	7%
56	7%
57	7%
58	10%
59	20%
60	25%
61	25%
62	25%
63	25%
64	25%
65	40%
66	40%
67	40%
68	40%
69	70%
70	100%

Terminated Vested Retirement Rates

Age	Proposed
55	5%
56	5%
57	7%
58	10%
59	15%
60	15%
61	15%
62	15%
63	15%
64	15%
65	30%
66	30%
67	30%
68	30%
69	30%
70	30%
71	30%
72	40%
73	40%
74	40%

Active Termination Rates

Age	Proposed
24	15%
25	15%
26	14%
27	14%
28	12%
29	12%
30	12%
31	12%
32	12%
33	12%
34	11%
35	11%
36	9%
37	9%
38	9%
39	9%
40	8%
41	8%
42	8%
43	7%
44	7%
45	7%
46	7%
47	7%
48	6%
49	6%
50	6%
51	5%
52	5%
53	5%
54	5%