

PENSION PLAN FOR EMPLOYEES AT ORNL



As a participant in the Pension Plan For Employees at ORNL (“the Plan”), you may elect to receive a pension benefit as a monthly check for the rest of your life. The amount of your benefit is based on the Plan’s benefit formula, and, depending on the form of payment you choose, may be payable throughout your lifetime and your spouse’s lifetime.

To make sure everyone who earns a benefit under the Plan receives it, each year the Plan’s actuary calculates the value of the Plan Liabilities and the Plan Assets. Based on that calculation, the actuary determines the amount of money ORNL is required to contribute to ensure the Plan is funded at the level needed to pay benefits earned under the Plan. You receive an Annual Funding Notice (AFN) each year describing the Plan’s Liabilities, Assets and Funding level. This Notice gives you an idea of the Plan’s financial health. We encourage you to read it and keep it with your benefit materials.

In this discussion, we will review the steps that the actuary takes to measure the Plan’s Liabilities and Assets.

PENSION PLAN LIABILITIES

Pension Plan Liabilities are a measurement of the value of the benefits earned by all participants in the Plan as of a specific date, including current employees, those who have left ORNL with a vested benefit, retirees and surviving spouses.



The Plan Liabilities for the last three years are shown on page 1 of the Annual Funding Notice.

HERE’S HOW PENSION LIABILITIES ARE CALCULATED

1

As a first step, the actuary collects data for the participants in the Plan, including their ages and benefit amounts.

2

Next, the actuary must reflect some assumptions about what the future will hold. What is the expected lifetime of each participant in the Plan? Is there a beneficiary? What is the beneficiary’s expected lifetime?

3

After gathering the data and setting the assumptions, the actuary determines the liability, based on the principle of the “Time Value of Money”, discussed on the next page.



The Annual Funding Notice shows the required contribution amounts for the current year and the two preceding years. See the Information Table on page 3 of the Annual Funding Notice.

TIME VALUE OF MONEY

After collecting the data for future benefits, actuaries have to translate those future benefits into an estimated liability, or measurement of the value of the future payments of the Plan, expressed in today's dollars. In order to do this, actuaries take into consideration interest rates defined by bonds in the market and the Time Value of Money.



The Time Value of Money is the idea that an amount of money today will be worth more in the future because it will earn interest. Conversely, in order to determine the amount that a future amount of money is worth today, it can be “discounted” back to today by reducing it for future interest.

For example, the actuaries may estimate that a year from now, the Plan will make total payments in the amount of \$130 million dollars. However, in order to express those payments in terms of today's dollars, the actuaries need to “discount” the \$130 million dollars for one year of future interest. Based on an interest rate of 5%, the \$130 million dollars payable one year from now is worth \$124 million dollars today (approximately $\$130 \text{ million} \times 95\% = \124 million).

After performing a similar calculation for all payments estimated to be made in the future, and summing up the results for all of these expected future payments, discounted for interest, the actuaries arrive at today's total liability.

Note, this calculation only impacts the estimated value of the Pension Plan liability to ORNL. It does not change the amount of the benefit that retirees receive each year, which is defined by the Plan.

IMPACT OF INTEREST RATE CHANGES ON PLAN LIABILITIES

The interest rates that the actuaries must use to value Pension Plan Liabilities are prescribed by the IRS and are based on bonds in the market. The IRS updates the interest rates to be used by the actuaries periodically, which will result in updates to the estimated Plan Liabilities. When interest rates are updated, the Plan Liabilities may go up or down. The Plan Liabilities are inversely related to the interest rates, meaning that the Plan Liabilities will increase if interest rates decrease. Similarly, Plan Liabilities will decrease if interest rates increase.

The table below demonstrates how the discounted value may change based on the interest rate.

Approximate Plan Liabilities at 6% Interest Rate	Approximate Plan Liabilities at 5% Interest Rate	Approximate Plan Liabilities at 4% Interest Rate
\$2.1 billion	\$2.3 billion	\$2.6 billion

PENSION PLAN ASSETS

Pension Plan assets are held in a trust for the purpose of providing benefits to the participants in the Plan. The Pension Plan trust is managed by fiduciaries who follow the Plan's investment policy.

Q The Plan Assets for the last three years are shown on page 1 of the Annual Funding Notice.

HOW PENSION PLAN ASSETS ARE DETERMINED

Here are the factors that impact the asset value:

- **Contributions** – Any contributions made during the year by ORNL or the Plan participants will increase the value of the assets.
- **Investment Return** – The Pension Plan assets are invested (as noted below) and will change each year due to the investment returns.

Keep in Mind:

Interest rates, investment returns and amounts paid out during the year as participants retire all have an impact on the assets of the Plan.

HOW PENSION PLAN ASSETS ARE INVESTED

The Plan's assets are invested in several investment categories including stocks, investment grade and high-yield debt instruments. The Plan's asset allocation is determined in accordance with the investment policy. The investment policy of the Plan *"is to produce income sufficient to meet all obligations as they come due by maintaining adequate liquidity and prudent risk parameters, including diversification of investment approaches, investment managers, asset classes and individual security holdings."*

Q The Investment Allocation of the Plan Assets is shown on page 3 of the Annual Funding Notice.



Where to Get More Information

Please refer to the Annual Funding Notice for more information about the Pension Plan. Additionally, you may contact UT-Battelle, L.L.C., P.O. Box 2008, Oak Ridge, TN 37831, telephone number: (865) 241-6215, or the Plan Administrator: Carissa Dunaway, PO Box 2008, MS-6434, Oak Ridge, TN 37831, telephone number: (865) 241-6215, e-mail: ornlbenefits@ornl.gov.