

Form 5500-SF

Department of the Treasury Internal Revenue Service

Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation

Short Form Annual Return/Report of Small Employee Benefit Plan

This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

Complete all entries in accordance with the instructions to the Form 5500-SF.

OMB Nos. 1210-0110 1210-0089

2024

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2024 or fiscal plan year beginning 01/01/2024 and ending 12/31/2024

- A This return/report is for: [X] a single-employer plan [] a multiple-employer plan (not multiemployer) (Pension Plan filers checking this box must attach Schedule MEP. Other plans must attach a list of participating employer information in accordance with the form instructions.)
B This return/report is [] the first return/report [] the final return/report [] an amended return/report [] a short plan year return/report (less than 12 months)
C Check box if filing under: [X] Form 5558 [] automatic extension [] DFVC program [] special extension (enter description)
D If the plan is a collectively-bargained plan, check here []
E If this is a retroactively adopted plan permitted by SECURE Act section 201, check here []

Part II Basic Plan Information—enter all requested information

1a Name of plan AMERICAN NUCLEAR INSURERS RETIREMENT PLAN
1b Three-digit plan number (PN) 003
1c Effective date of plan 02/01/2008
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) AMERICAN NUCLEAR INSURERS
95 GLASTONBURY BOULEVARD, SUITE 300 GLASTONBURY, CT 06033-4453
2b Employer Identification Number (EIN) 13-6112062
2c Sponsor's telephone number 860-682-1301
2d Business code (see instructions) 524210
3a Plan administrator's name and address [X] Same as Plan Sponsor.
3b Administrator's EIN
3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report.
a Sponsor's name
c Plan Name
4b EIN
4d PN
5a Total number of participants at the beginning of the plan year 55
b Total number of participants at the end of the plan year 52
c(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item)
c(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)
d(1) Total number of active participants at the beginning of the plan year 26
d(2) Total number of active participants at the end of the plan year 27
e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested 0

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established. Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

Table with 4 columns: SIGN HERE, Signature of plan administrator, Date, Enter name of individual signing as plan administrator. Row 1: Filed with authorized/valid electronic signature, 10/02/2025, LAURA CLOUSER. Row 2: Signature of employer/plan sponsor, Date, Enter name of individual signing as employer or plan sponsor.

- 6a** Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.) Yes No
- b** Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.) Yes No
- If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.**
- c** If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? Yes No Not determined
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year: 546963. (See instructions.)

Part III Financial Information			
7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	21427073	20254944
b Total plan liabilities	7b		
c Net plan assets (subtract line 7b from line 7a)	7c	21427073	20254944
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers	8a(1)	700000	
(2) Participants	8a(2)		
(3) Others (including rollovers)	8a(3)		
b Other income (loss)	8b	729246	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		1429246
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	2539115	
e Certain deemed and/or corrective distributions (see instructions) .	8e		
f Administrative service providers (salaries, fees, commissions)	8f	10785	
g Other expenses	8g	51475	
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		2601375
i Net income (loss) (subtract line 8h from line 8c)	8i		-1172129
j Transfers to (from) the plan (see instructions)	8j		

Part IV Plan Characteristics	
9a	If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions: <u>1A 1C</u>
b	If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

Part V Compliance Questions				
10 During the plan year:		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program)	10a		X	
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b		X	
c Was the plan covered by a fidelity bond?	10c	X		5000000
d Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	10d		X	
e Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.)	10e		X	
f Has the plan failed to provide any benefit when due under the plan?	10f		X	
g Did the plan have any participant loans? (If "Yes," enter amount as of year-end.)	10g		X	
h If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	10h			
i If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	10i			

Part VI Pension Funding Compliance

11 Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and lines 11a and b below.) If this is a defined contribution pension plan, leave line 11 blank and complete line 12 below. Yes No

a Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 **11a** 0

b PBGC missed contribution reporting requirements. If the plan is covered by PBGC and the amount reported on line 11a is greater than \$0, has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

Yes.

No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

No. Other. Provide explanation _____

12 Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? (If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.) If this is a defined benefit pension plan, leave line 12 blank and complete line 11 above. Yes No

a If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver. _____ Month _____ Day _____ Year _____

If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.

b Enter the minimum required contribution for this plan year **12b**

c Enter the amount contributed by the employer to the plan for this plan year **12c**

d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount) **12d**

e Will the minimum funding amount reported on line 12d be met by the funding deadline? Yes No N/A

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year? Yes No

a If "Yes," enter the amount of any plan assets that reverted to the employer this year. **13a**

b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? Yes No

c If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

13c(1) Name of plan(s):	13c(2) EIN(s)	13c(3) PN(s)

Part VIII IRS Compliance Questions

14a Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules? Yes No

14b If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).

Design-based safe harbor method

"Prior year" ADP test

"Current year" ADP test

N/A

15 If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter ___/___/___ (MM/DD/YYYY) and the Opinion Letter serial number _____.

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	<small>OMB No. 1210-0110</small> 2024 This Form is Open to Public Inspection
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For calendar plan year 2024 or fiscal plan year beginning 01/01/2024 and ending 12/31/2024

▶ **Round off amounts to nearest dollar.**
 ▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan <u>AMERICAN NUCLEAR INSURERS RETIREMENT PLAN</u>	B Three-digit plan number (PN) ▶	<u>003</u>
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>AMERICAN NUCLEAR INSURERS</u>	D Employer Identification Number (EIN) <u>13-6112062</u>	
E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	F Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

Part I Basic Information

1	Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2024</u>		
2	Assets:		
	a Market value	2a	<u>21411664</u>
	b Actuarial value	2b	<u>23169478</u>
3	Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target
	a For retired participants and beneficiaries receiving payment	<u>21</u>	<u>15914525</u>
	b For terminated vested participants	<u>8</u>	<u>213358</u>
	c For active participants	<u>26</u>	<u>2724989</u>
	d Total	<u>55</u>	<u>18852872</u>
4	If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>		
	a Funding target disregarding prescribed at-risk assumptions	4a	
	b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b	
5	Effective interest rate	5	<u>5.12 %</u>
6	Target normal cost		
	a Present value of current plan year accruals	6a	<u>270932</u>
	b Expected plan-related expenses	6b	<u>13000</u>
	c Target normal cost	6c	<u>283932</u>

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE			
	Signature of actuary	<u>09/12/2025</u>	Date
	<u>NORMAN E. YAMAMOTO</u>	<u>23-04754</u>	Most recent enrollment number
	<u>USI CONSULTING GROUP</u>	<u>860-856-2067</u>	Telephone number (including area code)
	<u>95 GLASTONBURY BOULEVARD SUITE 102 GLASTONBURY, CT 06033</u>		
	Address of the firm		

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions

Part II Beginning of Year Carryover and Prefunding Balances		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	1543038
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	1543038
10	Interest on line 9 using prior year's actual return of <u>12.80</u> %	0	197509
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		745880
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.19</u> %		38711
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		784591
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	1740547

Part III Funding Percentages			
14	Funding target attainment percentage	14	113.60 %
15	Adjusted funding target attainment percentage	15	120.81 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	108.84 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV Contributions and Liquidity Shortfalls		18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees		
01/02/2025	100000	0	06/05/2025	75000	0		
02/03/2025	75000	0	08/01/2025	75000	0		
03/03/2025	75000	0	08/25/2025	75000	0		
04/01/2025	75000	0					
05/01/2025	75000	0					
06/02/2025	75000	0					
			Totals ▶	18(b)	700000	18(c)	0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	655452

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? Yes No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? Yes No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost				
21 Discount rate:				
a Segment rates:	1st segment: 4.75 %	2nd segment: 4.96 %	3rd segment: 5.59 %	<input type="checkbox"/> N/A, full yield curve used
b Applicable month (enter code)				21b 0
22 Weighted average retirement age				22 64
23 Mortality table(s) (see instructions)	<input checked="" type="checkbox"/> Prescribed - combined	<input type="checkbox"/> Prescribed - separate	<input type="checkbox"/> Substitute	

Part VI Miscellaneous Items				
24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
26 Demographic and benefit information				
a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.....				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment.....				27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years				
28 Unpaid minimum required contributions for all prior years				28 0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....				29 0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29).....				30 0

Part VIII Minimum Required Contribution For Current Year				
31 Target normal cost and excess assets (see instructions):				
a Target normal cost (line 6c)				31a 283932
b Excess assets, if applicable, but not greater than line 31a				31b 283932
32 Amortization installments:	Outstanding Balance		Installment	
a Net shortfall amortization installment	0		0	
b Waiver amortization installment.....	0		0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount				33
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).....				34 0
	Carryover balance	Prefunding balance	Total balance	
35 Balances elected for use to offset funding requirement	0	0	0	
36 Additional cash requirement (line 34 minus line 35)				36 0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)				37 655452
38 Present value of excess contributions for current year (see instructions)				
a Total (excess, if any, of line 37 over line 36)				38a 655452
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances.....				38b 0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)				39 0
40 Unpaid minimum required contributions for all years				40 0

Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)				
41 If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input type="checkbox"/> 2021				

**Attachment to Schedule SB (2024 Form 5500)
Line 26 - Schedule of Active Participant Data**

American Nuclear Insurers Retirement Plan
EIN: 13-6112062 PN: 003

Attained Age	Completed Years of Credited Service																			
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25																				
25 to 29			2																	
30 to 34			2																	
35 to 39																				
40 to 44					3		1		1											
45 to 49			3				2		2											
50 to 54					1		2													
55 to 59	1		1				1													
60 to 64							1		2		1						1			
65 to 69																				
70 & over																				

Description of Actuarial Methods

Asset Valuation Method

The Actuarial Value of assets used in the development of plan contributions phases in recognition of the difference between the actual return on Market Value and the expected return on Market Value over a three-year period at 33.33% per year. The Actuarial Value is adjusted, if necessary, to comply with the IRC Sec. 430 requirement that the Actuarial Value of assets be within the range of 90% to 110% of the Market Value of assets. This method is equivalent to the smoothed market value method without phase-in described in Approval 3.16 of Revenue Procedure 2000-40.

Actuarial Cost Method

Funding Target Liability: Unit Credit Actuarial Cost Method.

Maximum Liability: Projected Unit Credit Actuarial Cost Method. The allocation of projected benefits between past years and future years is in proportion to the applicable rates of benefit accrual under the Plan.

Description of Actuarial Assumptions

Changes in Actuarial Assumptions as of January 1, 2024

The valuation reflects changes in the actuarial assumptions listed below. (The assumptions used before and after these changes are more fully described in the next section.)

- Mortality

With the exception of the valuation interest rate, the assumptions indicated were changed to represent the Enrolled Actuary's current best estimate of anticipated experience of the Plan.

Interest Rates

The American Rescue Plan Act of 2021 (ARPA) was signed into law on March 11, 2021. ARPA continues to use a 24-month bond averaging period methodology for determining the segmented interest rates used in the calculation of the Plan's target liability and a corridor based on a 25-year bond averaging period. However, now the corridor based on 25-year average segment rates and the applicable minimum and maximum percentages used for purposes of calculating the Plan's target liability to adjust the 24-month average segment rates has been extended. In addition, any 25-year average segment rate that is less than 5% is deemed to be 5%.

The Infrastructure Investment and Jobs Act was signed into law on November 15, 2021 that further extended funding stabilization. The corridors under the new laws are as follows:

Corridor After ARPA			
<u>Years</u>	<u>Corridor</u>	<u>Years</u>	<u>Corridor</u>
2020-2021	95% to 105% if not deferred	2020-2021	95% to 105% if not deferred
2022-2025	95%-105%	2022-2030	95%-105%
2026	90%-110%	2031	90%-110%
2027	85%-115%	2032	85%-115%
2028	80%-120%	2033	80%-120%
2029	75%-125%	2034	75%-125%
2030+	70%-130%	2035+	70%-130%

The corridor rates are used for purposes of the calculation of the Plan's minimum required contribution and the determination of the Plan's AFTAP certification, but cannot be reflected in the calculation of the Plan's maximum tax deductible contribution or the PBGC variable premium liability. This report reflects the rates under ARPA as allowed under current legislation.

Valuation: Segment rates for the month of the Valuation Date (i.e., January). The rates are shown below.

Segment	2024		2023	
	Before Adjustment	After Adjustment	Before Adjustment	After Adjustment
1st	4.37%	4.75%	2.13%	4.75%
2nd	4.96%	4.96%	3.62%	5.00%
3rd	4.95%	5.59%	3.93%	5.74%

Interest Rates (cont.)

The rates before adjustment are the standard 24-month segment rates determined under any prior interest rate relief laws. They are used in the determination of the Plan’s maximum tax deductible contribution.

The rates after adjustment reflect the application of the applicable corridor around the 25-year average rates. They are used in the determination of the Plan’s minimum required contribution and AFTAP for benefit restriction purposes.

PBGC premium: PBGC spot segment rates for the month preceding the premium payment year. This method was last elected for the 2023 plan year. The rates are shown below.

	2024	2023
1 st segment	5.01%	4.84%
2 nd segment	5.13%	5.15%
3 rd segment	5.15%	4.85%

Expected Return for Asset Smoothing

Year	Assumption	Not to Exceed
2024	6.25%	5.59%
2023	6.25%	5.74%
2022	6.25%	5.92%
2021	6.25%	5.47%

The expected long-term rate of return on assets is estimated using the Plan Sponsor’s long-term target asset allocation and the long-term capital market assumption for each asset class in that allocation provided by the pension fund’s investment advisor.

Mortality

Pri-2012 Mortality Table projected to valuation date with an adjusted version of Scale MP-2021. Combined tables for annuitants and non-annuitants.

Prior: RP-2014 Adjusted to 2006 Total Dataset Mortality Table projected to valuation date with Scale MP-2021. Combined tables for annuitants and non-annuitants.

Mortality Improvement

Projected using an adjusted version of Scale MP-2021 for 8 years for males, and 9 years for females, after the valuation date. Projection period is modified based upon participant’s age on valuation date.

Prior: Projected using Scale MP-2021 for 8 years for males, and 9 years for females, after the valuation date. Projection period is modified based upon participant’s age on valuation date.

The mortality assumption above and the lump sum mortality assumption described below were updated to the latest approved tables. The changes in assumption decreased liabilities by 0.5%.

Lump sum basis

Mortality: IRS 2024 Applicable Mortality Table for 417(e) dynamic.

(Prior Mortality: IRS 2023 Applicable Mortality Table for 417(e) dynamic.)

Interest Rates: Valuation Basis.

Inflation

2.40%.

This assumption is consistent with the Social Security Administration's current best estimate of the ultimate long-term (75-year horizon) annual percentage increase in CPI, as published in the 2023 OASDI Trustees Report.

Salary Increases

3.75%.

This assumption is based on historical and current data, adjusted to reflect advice from the sponsor and estimated future experience and professional judgement.

Assumed cash balance crediting rate

3.00%.

This assumption is based on historical and current data, adjusted to reflect advice from the sponsor and estimated future experience and professional judgement.

Benefit Election

100% of participants are assumed to elect payment in the form of an annuity.

Sample termination rates

Sample Rates		
Age	Male	Female
20	20.00%	30.00%
25	16.00%	22.70%
30	12.80%	16.70%
35	10.00%	12.20%
40	7.75%	7.75%
45	6.35%	6.35%
50	4.22%	4.22%
55	1.55%	1.55%
60	0.15%	0.15%

Based on a review of the assumed rates compared to historical experience, in light of the plan provisions and professional judgement, these assumed rates reflect a reasonable expectation for the future.

Retirement (from active status) rates

Sample Rates	
Age	Rate
55-61	2%
62	20%
63-64	2%
65-69	50%
70	100%

Retirement is assumed at the ages above if the participant has at least 15 years of service. Otherwise, 100% at age 65.

Based on a review of the assumed rates compared to historical experience, in light of the plan provisions and professional judgement, these assumed rates reflect a reasonable expectation for the future.

Retirement from inactive status

Earlier of age 65 or age 62 with 15 years of service.

Percent married

85%.

Age difference

Husbands are one year older than their wives.

Administrative expenses

An expense assumption is required under the funding rules. Plan-related expenses of \$19,000 are expected to be paid by the plan during the year.

Increases in IRC Sec. 401(a)(17) compensation limit

As required by law, no increases are assumed.

Increases in IRC Sec. 415(b) limit on benefits

As required by law, no increases are assumed.

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	<small>OMB No. 1210-0110</small> 2024 This Form is Open to Public Inspection
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For calendar plan year 2024 or fiscal plan year beginning 01/01/2024 and ending 12/31/2024


▶ **Round off amounts to nearest dollar.**
▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan AMERICAN NUCLEAR INSURERS RETIREMENT PLAN	B Three-digit plan number (PN) ▶	003
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF AMERICAN NUCLEAR INSURERS	D Employer Identification Number (EIN) 13-6112062	
E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	F Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

Part I Basic Information

1	Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2024</u>		
2	Assets:		
	a Market value	2a	21,411,664
	b Actuarial value	2b	23,169,478
3	Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target
	a For retired participants and beneficiaries receiving payment	21	15,914,525
	b For terminated vested participants	8	213,358
	c For active participants	26	2,724,989
	d Total	55	18,852,872
4	If the plan is in at-risk status, check the box and complete lines (a) and (b)		
	a Funding target disregarding prescribed at-risk assumptions	4a	
	b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b	
5	Effective interest rate	5	5.12%
6	Target normal cost		
	a Present value of current plan year accruals	6a	270,932
	b Expected plan-related expenses	6b	13,000
	c Target normal cost	6c	283,932

Statement by Enrolled Actuary
To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	 Signature of actuary	<u>09/12/2025</u> Date
	Norman E. Yamamoto Type or print name of actuary	<u>2304754</u> Most recent enrollment number
	USI Consulting Group Firm name	<u>860-856-2067</u> Telephone number (including area code)
	95 Glastonbury Boulevard Suite 102 Glastonbury CT 06033 Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions

Part V Assumptions Used to Determine Funding Target and Target Normal Cost				
21 Discount rate:				
a Segment rates:	1st segment: 4.75 %	2nd segment: 4.96 %	3rd segment: 5.59%	<input type="checkbox"/> N/A, full yield curve used
b Applicable month (enter code).....				21b 0
22 Weighted average retirement age				22 64
23 Mortality table(s) (see instructions)	<input checked="" type="checkbox"/> Prescribed - combined <input type="checkbox"/> Prescribed - separate <input type="checkbox"/> Substitute			

Part VI Miscellaneous Items				
24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
26 Demographic and benefit information				
a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment.....				27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years				
28 Unpaid minimum required contributions for all prior years				28 0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....				29 0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)				30 0

Part VIII Minimum Required Contribution For Current Year				
31 Target normal cost and excess assets (see instructions):				
a Target normal cost (line 6c).....				31a 283,932
b Excess assets, if applicable, but not greater than line 31a				31b 283,932
32 Amortization installments:	Outstanding Balance		Installment	
a Net shortfall amortization installment	0		0	
b Waiver amortization installment	0		0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount				33
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....				34 0
	Carryover balance	Prefunding balance	Total balance	
35 Balances elected for use to offset funding requirement	0	0	0	
36 Additional cash requirement (line 34 minus line 35).....				36 0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....				37 655,452
38 Present value of excess contributions for current year (see instructions)				
a Total (excess, if any, of line 37 over line 36)				38a 655,452
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances				38b 0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)				39 0
40 Unpaid minimum required contributions for all years				40 0

Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)				
41 If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input type="checkbox"/> 2021				

**Attachment to 2024 Form 5500 Schedule SB
Line 22 --Weighted Average Retirement Age**

Plan Name American Nuclear Insurers Retirement Plan
Sponsor's EIN 13-6112062
Plan No. 003

Calculation of Weighted Average Retirement Age
(ignoring other sources of terminations)

Age	Rates of Retirement	Lives	(a)	(b)
			Retirements	Retirements x Age
55	0.0200	1,000	20	1,100
56	0.0200	980	20	1,098
57	0.0200	960	19	1,095
58	0.0200	941	19	1,092
59	0.0200	922	18	1,088
60	0.0200	904	18	1,085
61	0.0200	886	18	1,081
62	0.2000	868	174	10,765
63	0.0200	695	14	875
64	0.0200	681	14	871
65	0.5000	667	333	21,677
66	0.5000	333	167	11,005
67	0.5000	167	83	5,586
68	0.5000	83	42	2,835
69	0.5000	42	21	1,438
70	1.0000	21	21	1,459
Total			1,000	64,150

Weighted Average Retirement Age: (b) / (a) = **64**

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Most Recent Plan Amendments

Plan Amendment	Effective Date
1. Pay credit in year of termination and special pay credit	January 1, 2015
2. Interest credits upon Plan termination	January 1, 2017

Participation

Age requirement

None.

Service requirement

Employees who are scheduled to work at least 1,000 hours in a twelve-month period are eligible at date of hire. Employees who do not complete 1,000 hours in the twelve-month period measured from date of hire to the first anniversary of date of hire (Computation Period) are not eligible unless they complete 1,000 hours of service in a succeeding Computation Period; they will enter at the beginning of the Computation Period during which they complete 1,000 hours of service.

Groups Covered

Group

All employees of American Nuclear Insurers.

Normal Retirement, Non-Cash Balance Members

Age requirement

65.

Service requirement

5 years of vesting service.

Amount

Effective January 1, 1989 and closed to new hires and rehires as of January 1, 2009:

1. 1.15% of final average compensation up to covered compensation level multiplied by years and months of service up to a maximum of 35 years; plus
2. 1.55% of final average compensation in excess of covered compensation level multiplied by years and months of service up to a maximum of 35 years; plus
3. 0.5% of final average compensation multiplied by years and months of service over 35 years up to 45 years.

Prior to January 1, 1989, a social security offset formula was in effect.

Final average compensation means an average of the highest consecutive 60 months of earnings out of the 120 months prior to retirement or termination.

Minimum benefit is \$1,200 annually, reduced proportionately for less than 15 years of service and further reduced by the appropriate early retirement and joint and survivor factors.

Normal Retirement, Cash Balance Members

Age requirement

65.

Vesting requirement

3 years of vesting service.

Cash balance amount

Effective January 1, 2011 for employees hired or rehired after January 1, 2009:

Pay Credit:

The Cash Balance Member receives a pay credit, based on age and Years of Credited Service as shown in the below table, on the last day of each Plan Year.

Age	Less than 10 Years of Credited Service	10 or more Years of Credited Service
Under 40	3.00%	4.00%
40-55	4.00%	5.00%
56 and Over	5.00%	6.00%

Note that a Special Pay Credit was made during the 2011 plan year for all Cash Balance Members employed during the 2009 and/or 2010 plan year. The above table applies to these Special Pay Credits, based on the plan year for which the credit is made.

Interest Credit:

Simple interest is credited on the last day of the Plan Year based on the Cash Balance Account as of the first day of the Plan Year. Simple interest is credited from the first day of the Plan Year to the end of the month preceding the month in which the Cash Balance Member's Pension Starting Date occurs, assuming that 1/12th of the Interest Credit for the Plan Year is credited for each month. The rate of interest used to determine the Interest Credit for a Plan Year is the 30 Year Treasury Rate on October 31 of the prior Plan Year.

The Interest Credit above is subject to a minimum crediting rate of 2.28%.

Subsidized Early Retirement, Non-Cash Balance Members

Age requirement

55.

Service requirement

15 years of vesting service.

Amount

Determined in the same manner as normal retirement benefit but based on service and earnings as of early retirement, multiplied by the following early retirement factors.

Age	Adjustment
62-64	100%
61	97%
60	94%
59	89%
58	84%
57	79%
56	74%
55	69%

Additional Amount

If a participant retires prior to age 62, the Plan will pay additional benefits from early retirement date to age 62 equal to 0.4% of final average compensation up to the covered compensation level multiplied by years and months of benefit service to a maximum of 35 years, reduced by the early retirement factors shown above.

Early Retirement, Non-Cash Balance Members

Age requirement

55.

Service requirement

5 years of vesting service.

Amount

Determined in the same manner as normal retirement benefit but based on service and earnings as of early retirement, multiplied by the following early retirement factors.

Age	Adjustment
64	90.9%
63	82.8%
62	75.6%
61	69.3%
60	63.6%
59	58.6%
58	54.0%
57	49.9%
56	46.2%
55	42.8%

Early Retirement, Cash Balance Members

Age requirement

None.

Service requirement

3 years of vesting service.

Amount

Cash Balance Account in lump sum form or actuarially equivalent annuity.

Late Retirement

Additional accruals to actual retirement date.

Disability

Age requirement

None.

Service requirement

None.

Amount

None.

Vesting, Non-Cash Balance Members

Age requirement

None.

Service requirement

5 years of service.

Amount

Regular pension accrued payable at age 65. Early retirement is available at age 55.

Vesting, Cash Balance Members

Age requirement

None.

Service requirement

3 years of service.

Amount

Regular pension accrued payable at age 65. Early retirement is available at age 55.

Pre-retirement Death Benefit (Subsidized), Non-Cash Balance Members

Age requirement

55.

Service requirement

15 years of service and active at death.

Amount

If married, 50% of the accrued benefit based on service and earnings up to participant's date of death (including the supplemental benefit), payable immediately. If not married, this benefit is not applicable.

Pre-retirement Death Benefit, Non-Cash Balance Members

Age requirement

None.

Service requirement

5 years of service and not eligible for subsidized Early Retirement.

Amount

If married, 50% of benefit determined in same manner as early retirement benefit based on service and earnings up to participant's date of death (including the supplemental benefit); reduction is made for early retirement (if payable prior to age 65) and the joint annuity option. If not married, this benefit is not applicable.

Pre-retirement Death Benefit, Cash Balance Members

Age requirement

None.

Service requirement

3 years of service.

Amount

Cash Balance Account in lump sum form. If the beneficiary is the spouse, then an annuity or lump sum may be elected.

Service

Vesting

One year of vesting service is credited for each Computation Period in which at least one hour of service is performed. Cash balance members are fully vested at the earlier of attainment of age 65 and the 3rd anniversary of employment.

Credited (non-Cash Balance)

Period of employment in years and months; credit is given for any month in which the participant has at least one hour of service.

Forms of Benefit

Normal Form

If married, pension benefits are paid in the form of a 50% joint and survivor annuity unless this form is waived by the participant and spouse. If not waived, the benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. If waived by the participant and spouse, or if not married, benefits are payable for the life of the participant without reduction or in any other available optional form elected by the participant in an actuarially equivalent amount.

Optional Forms

The normal form of benefit is a single life annuity for single participants and a 50% Joint & Survivor for married participants. The participant may elect these other actuarially equivalent forms: 50%, 75%, 100% Joint & Survivor annuity (for Spouse only), 50%, 75%, 100% pop-up annuity (for Spouse only), 10-year certain & life annuity, 50% or 100% Joint & Survivor or pup-up annuity (for non-Spouse). Actuarial equivalence is based on 1951 GA 95% male/5% female for the participant and 5% male/95% female for the beneficiary at 4.50% interest.

Lump sum benefit is payable in its entirety to Cash Balance Members, or if the present value of the monthly benefit is less than \$10,000 for non-Cash Balance members. Spousal consent is required if the lump sum is greater than \$5,000. Lump sums are payable based on the participant's age (nearest birthday) on date of distribution. Actuarial equivalence for lump sum purposes is based on the PPA Lump Sum yield curve with phase-in published for November prior to plan year it is payable and the 417(e)(3) applicable mortality table as described in Revenue Ruling 2008-85.

Actuarial Equivalence

1951 Group Annuity Mortality tables with males setback 1 year, females setback 6 years and a 95%/5% blend for employees, 5%/95% blend for spouses and beneficiaries, and 4.50% interest.

For the lump sum and level income options, actuarial equivalence is based on 417(e) assumptions.

Cash balance accounts are converted to an annuity based on the Plan's actuarial equivalence or the assumptions set forth in 417(e), whichever produces the greater annuity.

Schedule SB, line 32 – Schedule of Amortizations Bases				
Date Established	Type of Base	Amortization Installment	Years Remaining	Present Value of Remaining Installments as of 1/1/2024
1/1/2024	Shortfall	0	15	0
Total		0		0