

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans 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.	OMB Nos. 1210-0110 1210-0089 2023 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023	
A	This return/report is for: ☐ a multiemployer plan ☒ a multiple-employer plan (Filers checking this box must provide participating employer information in accordance with the form instructions.) ☐ a single-employer plan ☐ a DFE (specify) _____ ☐ the first return/report ☐ the final return/report ☒ an amended return/report ☐ a short plan year return/report (less than 12 months)
C	If the plan is a collectively-bargained plan, check here. ▶ ☐
D	Check box if filing under: ☒ Form 5558 ☐ automatic extension ☐ the DFVC program ☐ special extension (enter description)
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 D. E. SHAW & CO. 401(K) PLAN
1b	Three-digit plan number (PN) ▶ 001
1c	Effective date of plan 01/01/1990
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) D. E. SHAW & CO., L.P. TWO MANHATTAN WEST 375 NINTH AVENUE, FL 52 NEW YORK, NY 10001
2b	Employer Identification Number (EIN) 13-3695715
2c	Plan Sponsor's telephone number 212-478-0307
2d	Business code (see instructions) 523900

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 accompanying schedules, statements and attachments, 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.

SIGN HERE	Filed with authorized/valid electronic signature.	01/16/2025	PAUL MELE
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	02/05/2025	YOAV CITRON
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

3a Plan administrator's name and address ☒ 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
5 Total number of participants at the beginning of the plan year	5 1781
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d). a(1) Total number of active participants at the beginning of the plan year a(2) Total number of active participants at the end of the plan year b Retired or separated participants receiving benefits c Other retired or separated participants entitled to future benefits d Subtotal. Add lines 6a(2) , 6b , and 6c e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits f Total. Add lines 6d and 6e g(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item) g(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	6a(1) 1101 6a(2) 1293 6b 0 6c 740 6d 2033 6e 1 6f 2034 6g(1) 1767 6g(2) 2020 6h 70
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	7

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

2E 2F 2G 2J 2K 2T 3D 3H

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor
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10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- (1) ☒ **R** (Retirement Plan Information)
- (2) ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- (3) ☐ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary
- (4) ☐ **DCG** (Individual Plan Information) – Number Attached _____
- (5) ☒ **MEP** (Multiple-Employer Retirement Plan Information)

b General Schedules

- (1) ☒ **H** (Financial Information)
- (2) ☐ **I** (Financial Information – Small Plan)
- (3) ☐ **A** (Insurance Information) – Number Attached _____
- (4) ☒ **C** (Service Provider Information)
- (5) ☐ **D** (DFE/Participating Plan Information)
- (6) ☐ **G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2023 Form M-1 annual report. If the plan was not required to file the 2023 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2023
		This Form is Open to Public Inspection.

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan D. E. SHAW & CO. 401(K) PLAN	B Three-digit plan number (PN) ▶ 001
C Plan sponsor's name as shown on line 2a of Form 5500 D. E. SHAW & CO., L.P.	D Employer Identification Number (EIN) 13-3695715

Part I

Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1

Information on Persons Receiving Only Eligible Indirect Compensation

- a

Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).....

Yes

x

No
- b

If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b)

Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

(b)

Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

VANGUARD ADVISERS INC.

23-2811930

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
26	NONE	19260	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

THE VANGUARD GROUP, INC.

23-1945930

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
15 25 37 52	NONE	1865	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
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(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

SCHEDULE H (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2023
		This Form is Open to Public Inspection

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023		
A Name of plan D. E. SHAW & CO. 401(K) PLAN	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 D. E. SHAW & CO., L.P.		
D Employer Identification Number (EIN) 13-3695715		

Part I	Asset and Liability Statement		
1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.			
	Assets	(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)		
(2) Participant contributions	1b(2)		
(3) Other	1b(3)		
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)	908420	905049
(9) Value of interest in common/collective trusts	1c(9)		
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)		
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	462652560	591279272
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

1d Employer-related investments:		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	463560980	592184321
Liabilities			
g Benefit claims payable	1g		
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j		
k Total liabilities (add all amounts in lines 1g through 1j)	1k	0	0
Net Assets			
l Net assets (subtract line 1k from line 1f)	1l	463560980	592184321

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	10876546	
(B) Participants	2a(1)(B)	33903273	
(C) Others (including rollovers)	2a(1)(C)	4709397	
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		49489216
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)	58973	
(F) Other	2b(1)(F)		
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		58973
(2) Dividends: (A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	15083649	
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		15083649
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		
(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)		
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts.....	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts.....	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts.....	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		75893032
c Other income	2c		12635
d Total income. Add all income amounts in column (b) and enter total	2d		140537505

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	11861402	
(2) To insurance carriers for the provision of benefits.....	2e(2)		
(3) Other	2e(3)	436	
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		11861838
f Corrective distributions (see instructions)	2f		32241
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses:			
(1) Salaries and allowances	2i(1)		
(2) Contract administrator fees.....	2i(2)		
(3) Recordkeeping fees.....	2i(3)		
(4) IQPA audit fees.....	2i(4)		
(5) Investment advisory and investment management fees	2i(5)		
(6) Bank or trust company trustee/custodial fees	2i(6)		
(7) Actuarial fees	2i(7)		
(8) Legal fees	2i(8)		
(9) Valuation/appraisal fees	2i(9)		
(10) Other trustee fees and expenses	2i(10)		
(11) Other expenses	2i(11)	20085	
(12) Total administrative expenses. Add lines 2i(1) through (11)	2i(12)		20085
j Total expenses. Add all expense amounts in column (b) and enter total	2j		11914164

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		128623341
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☒ Unmodified (2) ☐ Qualified (3) ☐ Disclaimer (4) ☐ Adverse

b Check the appropriate box(es) to indicate whether the IQPA performed an ERISA section 103(a)(3)(C) audit. Check both boxes (1) and (2) if the audit was performed pursuant to both 29 CFR 2520.103-8 and 29 CFR 2520.103-12(d). Check box (3) if pursuant to neither.

(1) ☒ DOL Regulation 2520.103-8 (2) ☐ DOL Regulation 2520.103-12(d) (3) ☐ neither DOL Regulation 2520.103-8 nor DOL Regulation 2520.103-12(d).

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: **ERNST & YOUNG LLP**

(2) EIN: **34-6565596**

d The opinion of an independent qualified public accountant is **not attached** as part of Schedule H because:

(1) ☐ This form is filed for a CCT, PSA, DCG or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l. DCGs do not complete lines 4e, 4f, 4k, 4l, and 5, and DCGs generally complete the rest of Part IV collectively for all plans in the DCG, except as otherwise provided (see instructions).

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.)		☒	
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)		☒	
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)		☒	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)		☒	
e Was this plan covered by a fidelity bond?	☒		100000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		☒	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?		☒	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?		☒	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	☒		
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked and see instructions for format requirements.)		☒	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?		☒	
l Has the plan failed to provide any benefit when due under the plan?		☒	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)		☒	
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b 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.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) ☐ Yes ☐ No ☐ Not determined

If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year _____.

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2023 This Form is Open to Public Inspection.
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For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan D. E. SHAW & CO. 401(K) PLAN	B Three-digit plan number (PN) ▶ 001
C Plan sponsor's name as shown on line 2a of Form 5500 D. E. SHAW & CO., L.P.	D Employer Identification Number (EIN) 13-3695715

Part I	Distributions
--------	---------------

All references to distributions relate only to payments of benefits during the plan year.

1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions.....	1
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): 23-2186884 Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.	
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year	3

Part II	Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)
---------	--

4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? If the plan is a defined benefit plan, go to line 8.	☐ Yes ☐ No ☐ N/A
5 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 ruling letter granting the waiver. Date: Month _____ Day _____ Year _____ If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.	
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived)	6a
b Enter the amount contributed by the employer to the plan for this plan year	6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount)	6c
If you completed line 6c, skip lines 8 and 9.	
7 Will the minimum funding amount reported on line 6c be met by the funding deadline?	☐ Yes ☐ No ☐ N/A
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change?	☐ Yes ☐ No ☐ N/A

Part III	Amendments
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9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box.	☐ Increase ☐ Decrease ☐ Both ☐ No
---	--

Part IV	ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.
---------	--

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?	☐ Yes ☐ No
11 a Does the ESOP hold any preferred stock?	☐ Yes ☐ No
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.)	☐ Yes ☐ No
12 Does the ESOP hold any stock that is not readily tradable on an established securities market?	☐ Yes ☐ No

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Schedule R (Form 5500) 2023
v. 230707

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:		
a The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment)	14a	
b The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14b	
c The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14c	
15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:		
a The corresponding number for the plan year immediately preceding the current plan year	15a	
b The corresponding number for the second preceding plan year	15b	
16 Information with respect to any employers who withdrew from the plan during the preceding plan year:		
a Enter the number of employers who withdrew during the preceding plan year	16a	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	16b	
17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment..... ☐		

Part VI	Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans
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18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment..... ☐	
19 If the total number of participants is 1,000 or more, complete lines (a) and (b):	
a Enter the percentage of plan assets held as: Public Equity: _____% Private Equity: _____% Investment-Grade Debt and Interest Rate Hedging Assets: _____% High-Yield Debt: _____% Real Assets: _____% Cash or Cash Equivalents: _____% Other: _____%	
b Provide the average duration of the Investment-Grade Debt and Interest Rate Hedging Assets: ☐ 0-5 years ☐ 5-10 years ☐ 10-15 years ☐ 15 years or more	
20 PBGC missed contribution reporting requirements. If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20.	
a Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☐ No	
b If line 20a is "Yes," 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. _____	

Part VII	IRS Compliance Questions
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21a 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	
21b 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	
22 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 <u>06 / 30 / 2020</u> (MM/DD/YYYY) and the Opinion Letter serial number <u>Q703218A</u> .	

SCHEDULE MEP (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration	MULTIPLE-EMPLOYER RETIREMENT PLAN INFORMATION This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and Section 6058(a) of the Internal Revenue Code (the Code) ► File as an attachment to Form 5500.	OMB No. 1210-0110 2023 This Form is Open to Public Inspection
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For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023		
A Name of plan D. E. SHAW & CO. 401(K) PLAN	B Three-digit Plan number (PN) ►	001
C Plan administrator's name as shown on line 3a of Form 5500/Form 5500-SF D. E. SHAW & CO., L.P.	D Administrator's EIN 13-3695715	

Part I	Type of Multiple-Employer Pension Plan. All multiple-employer pension plans must complete.
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1 Check the appropriate box to indicate type of multiple-employer pension plan. (Only defined contribution plans may check lines 1a, 1b, and 1c. Defined benefit plans and defined contribution plans not checking lines 1a, 1b, or 1c should check line 1d. See Instructions).

- a** ☐ association retirement plan (See 29 CFR 2510.3-55) (Complete Part II)
- b** ☐ professional employer organization plan (PEO Plan) (See 29 CFR 29 CFR 2510.3-55) (Complete Part II)
- c** ☐ pooled employer plan (PEP) (See 29 CFR 2510.3-44) (Complete Parts II and III)
- d** ☒ other multiple-employer pension plan (Describe) CORPORATE MEP (Complete Part II)

Part II	Participating Employer Information.
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2 All multiple-employer pension plans that are subject to section 210(a) of ERISA (see instructions for filing the Form 5500) must complete Part II, in addition to Part I, in accordance with the instructions, to report the information for each employer participating in the multiple-employer pension plan. **Defined contribution plans must complete lines 2a-2d. All other multiple-employer pension plans complete lines 2a-2c only. Complete as many entries as needed to list the required information for each participating employer that is not an individual person (see instructions).**

2a Name of Participating Employer ARCESIUM LLC	2b EIN 36-4788861	2c Percentage of Total Contributions for the Plan Year 10.14	2d Aggregate Account Balances Attributable to Participating Employer 31512179
2a Name of Participating Employer D. E. SHAW & CO., L. P.	2b EIN 13-3695715	2c Percentage of Total Contributions for the Plan Year 69.28	2d Aggregate Account Balances Attributable to Participating Employer 442071363

CAUTION Do not individually list information for working owners (see instructions and 29 CFR 2510.3-55(d)(2)) or other individuals who are participants or beneficiaries in the plan or arrangement that are no longer associated with a particular participating employer or participating employer plan (see instructions). Providing identifying information for individuals may result in rejection of this filing. If there are any such individuals in the plan, answer "Yes" to line 2e and provide the total information for all such individuals, without providing names or other identifying information.

2e Does the plan include any individuals not participating through an employer or who are individual working owners?	2e	☒ Yes ☐ No
2f If you answer "Yes" in line 2e, enter a good faith estimate of the percentage of total contributions made by all such individuals that are not listed on line 2a during the plan year.	2f	
2g If you answer "Yes" in Line 2e, enter the aggregate account balances for all such individuals that are not listed on line 2a.	2g	0

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

**Schedule MEP (2023)
v. 230728**

Part II Participating Employer Information (Continued).

Use this page for additional participating employer information.

2 All multiple-employer pension plans that are subject to section 210(a) of ERISA (see instructions for filing the Form 5500) must complete Part II, in addition to Part I, in accordance with the instructions, to report the information for each employer participating in the multiple-employer pension plan.

Defined contribution plans must complete lines 2a-2d. All other multiple-employer pension plans complete lines 2a-2c only. Complete as many entries as needed to list the required information for each participating employer that is not an individual person (see instructions).

2a Name of Participating Employer	2b EIN	2c Percentage of Total Contributions for the Plan Year	2d Aggregate Account Balances Attributable to Participating Employer
D. E. SHAW & CO., INC	13-3839469	0.09	1808117
2a Name of Participating Employer D. E. SHAW INTERNATIONAL OPERATIONS, L. L. C.	26-3434324	0.08	147394
2a Name of Participating Employer D. E. SHAW RESEARCH, LLC	13-4121524	11.80	86572640
2a Name of Participating Employer DESRI HOLDINGS, L.P.	30-0945146	0.58	2733597
2a Name of Participating Employer DESRI PROJECT MANAGEMENT SERVICES, LLC	81-2077601	5.54	10098441
2a Name of Participating Employer D. E. SHAW STAFF, LLC	27-1927930	2.40	14192818
2a Name of Participating Employer D. E. SHAW TECHNOLOGY DEVELOPMENT, LLC	71-0957909	0.09	3047770
2a Name of Participating Employer D. E. SHAW & CO. II, INC.	13-4152444	0.00	0
2a Name of Participating Employer D. E. SHAW & CO., L.L.C.	13-3799946	0.00	0

CAUTION Do not individually list information for working owners (see instructions and 29 CFR 2510.3-55(d)(2)) or other individuals who are participants or beneficiaries in the plan or arrangement that are no longer associated with a particular participating employer or participating employer plan (see instructions). Providing identifying information for individuals may result in rejection of this filing. If there are any such individuals in the plan, answer "Yes" to line 2e and provide the total information for all such individuals, without providing names or other identifying information.

Part II Participating Employer Information (Continued).

Use this page for additional participating employer information.

2 All multiple-employer pension plans that are subject to section 210(a) of ERISA (see instructions for filing the Form 5500) must complete Part II, in addition to Part I, in accordance with the instructions, to report the information for each employer participating in the multiple-employer pension plan.

Defined contribution plans must complete lines 2a-2d. All other multiple-employer pension plans complete lines 2a-2c only. Complete as many entries as needed to list the required information for each participating employer that is not an individual person (see instructions).

2a Name of Participating Employer	2b EIN	2c Percentage of Total Contributions for the Plan Year	2d Aggregate Account Balances Attributable to Participating Employer
D. E. SHAW INTERNATIONAL DEVELOPMENT, L.L.C.	45-2452694	0.00	0
D. E. SHAW RENEWABLE INVESTMENTS, L.L.C.	45-3765166	0.00	0
PICULARIUM, LLC	81-1206781	0.00	0
DESRES SUB 1, LLC.	85-1672926	0.00	0

CAUTION Do not individually list information for working owners (see instructions and 29 CFR 2510.3-55(d)(2)) or other individuals who are participants or beneficiaries in the plan or arrangement that are no longer associated with a particular participating employer or participating employer plan (see instructions). Providing identifying information for individuals may result in rejection of this filing. If there are any such individuals in the plan, answer "Yes" to line 2e and provide the total information for all such individuals, without providing names or other identifying information.

Part III

Pooled Employer Plan Information

Line 3. All Pooled employer plans must answer all of the questions in Part III, in addition to completing all of Parts I and II.

- 3a

Is the pooled plan provider (identified as the plan sponsor and administrator in Part II of the Form 5500) currently in compliance with the Form PR (Pooled Plan Provider Registration Statement) requirements? (See instructions and 29 CFR 2510.3-44)

☐ Yes ☐ No
- 3b

If line 3a is "Yes", enter the ACK ID for the most recent Form PR that was required to be filed under the Form PR filing requirements. (Failure to enter a valid ACK ID will subject the Form 5500 filing to rejection as incomplete.)

ACK ID

Report of Independent Auditors

To D. E. Shaw & Co., L.P.:

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We have performed audits of the financial statements of D. E. Shaw & Co. 401 (k) Plan (the Plan), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 (ERISA), as permitted by ERISA Section 103(a)(3)(C) (ERISA Section 103(a)(3)(C) audit). The financial statements comprise the statements of net assets available for benefits as of December 31, 2023 and 2022, and the related statement of changes in net assets available for benefits for the year ended December 31, 2023, and the related notes (collectively referred to as the “financial statements”).

Management, having determined it is permissible in the circumstances, has elected to have the audits of the financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA. As permitted by ERISA Section 103(a)(3)(C), our audits need not extend to any statements or information related to assets held for investment of the Plan (investment information) by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA (qualified institution).

Management has obtained certifications from a qualified institution as of December 31, 2023 and 2022, and for the year ended December 31, 2023, stating that the certified investment information, as described in Note 9 to the financial statements, is complete and accurate.

Opinion

In our opinion, based on our audits and on the procedures performed as described in the Auditor’s Responsibilities for the Audit of the Financial Statements section

- the amounts and disclosures in the accompanying financial statements, other than those agreed to or derived from the certified investment information, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.
- the information in the accompanying financial statements related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our ERISA Section 103(a)(3)(C) audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free

from material misstatement, whether due to fraud or error. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Management is also responsible for maintaining a current plan instrument, including all plan amendments, administering the Plan, and determining that the Plan's transactions that are presented and disclosed in the financial statements are in conformity with the Plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditor's Responsibilities for the Audit of the Financial Statements

Except as described in the Scope and Nature of the ERISA Section 103(a)(3)(C) Audit section of our report, our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

Our audits did not extend to the certified investment information, except for obtaining and reading the certification, comparing the certified investment information with the related information presented and disclosed in the financial statements, and reading the disclosures relating to the certified investment information to assess whether they are in accordance with the presentation and disclosure requirements of accounting principles generally accepted in the United States of America.

Accordingly, the objective of an ERISA Section 103(a)(3)(C) audit is not to express an opinion about whether the financial statements as a whole are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Other Matter

Supplemental Schedule Required by ERISA

The supplemental schedule of assets (held at end of year) as of December 31, 2023, (referred to as the “supplemental schedule”), is presented for purposes of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information included in the supplemental schedule, other than that agreed to or derived from the certified investment information, has been subjected to auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with GAAS. For information included in the supplemental schedule that agreed to or is derived from the certified investment information, we compared such information to the related certified investment information.

In forming our opinion on the supplemental schedule, we evaluated whether the supplemental schedule, other than the information agreed to or derived from the certified investment information, including its form and content, is presented in conformity with the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA.

In our opinion

- the form and content of the supplemental schedule, other than the information in the supplemental schedule that agreed to or is derived from the certified investment information, are presented, in all material respects, in conformity with the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA.
- the information in the supplemental schedule related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Ernst & Young LLP

July 26, 2024

Schedule of Assets (Held at End of Year)

Schedule H, Line 4i

December 31, 2023

<i>Description of Plan Investments</i>	<i>Shares</i>	<i>Fair Value</i>
Vanguard Institutional Index Fund Institutional Plus Shares	373,938	\$ 147,133,579
Vanguard Mid-Cap Index Fund Institutional Shares	709,528	45,154,393
Vanguard Target Retirement 2050 Fund	983,416	43,702,998
Vanguard Target Retirement 2045 Fund	1,441,925	38,441,711
Vanguard Total Stock Market Index Fund Institutional Shares	312,869	36,139,478
Vanguard Target Retirement 2055 Fund	707,961	35,107,773
Vanguard Total International Stock Index Fund Institutional Shares	277,622	34,563,956
Vanguard Small-Cap Index Fund Institutional Shares	310,971	31,778,118
Vanguard Target Retirement 2040 Fund	627,956	24,678,674
Vanguard Target Retirement 2060 Fund	515,819	23,567,760
Vanguard Total Bond Market Index Fund Institutional Shares	2,083,227	20,228,136
Vanguard Target Retirement 2035 Fund	829,633	18,351,485
Vanguard Treasury Money Market Fund	14,009,543	14,009,543
Vanguard REIT Index Fund Institutional Shares	715,809	13,865,214
Vanguard Target Retirement 2030 Fund	298,658	10,593,417
Vanguard High Dividend Yield Index Fund Admiral Shares	220,447	7,418,038
Vanguard Target Retirement 2065 Fund	236,940	7,096,367
Vanguard Target Retirement 2025 Fund	364,774	6,704,542
Vanguard Developed Markets Index Fund Institutional Shares	422,834	6,524,328
Vanguard Inflation-Protected Securities Fund Institutional Shares	644,112	6,041,775
Vanguard Emerging Markets Stock Index Fund Institutional Shares	212,253	5,514,343
Vanguard Short-Term Investment-Grade Fund Admiral Shares	317,882	3,251,936
Vanguard Target Retirement Income Fund	218,604	2,844,044
Vanguard Long-Term Treasury Index Fund Admiral Shares	120,385	2,496,779
Vanguard Intermediate-Term Treasury Index Fund Admiral Shares	115,504	2,314,703
Vanguard Target Retirement 2020 Fund	72,849	1,957,451
Vanguard High-Yield Corporate Fund Admiral Shares	169,551	918,965
Vanguard Total International Bond Index Fund Admiral Shares	38,462	758,466
Vanguard Target Retirement 2070 Fund	5,118	121,300
Total Plan Investments (see notes below)		591,279,272
Loans to Participants		
(Interest rate of 4.25%-9.50%, maturity dates ranging from February 2024 to December 2029)		905,049
Total Plan Investments and Loans to Participants		\$ 592,184,321

Notes:

1. The Plan Investments above qualify as party-in-interest transactions.
2. Cost information is not required because Plan Investments are participant directed.

D. E. Shaw & Co. 401(k) Plan (EIN: 13-3695715 PN: 001)

Financial Statements and Supplemental Schedule

December 31, 2023 and 2022 and Year Ended December 31, 2023

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Report of Independent Auditors

To D. E. Shaw & Co., L.P.:

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We have performed audits of the financial statements of D. E. Shaw & Co. 401 (k) Plan (the Plan), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 (ERISA), as permitted by ERISA Section 103(a)(3)(C) (ERISA Section 103(a)(3)(C) audit). The financial statements comprise the statements of net assets available for benefits as of December 31, 2023 and 2022, and the related statement of changes in net assets available for benefits for the year ended December 31, 2023, and the related notes (collectively referred to as the “financial statements”).

Management, having determined it is permissible in the circumstances, has elected to have the audits of the financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA. As permitted by ERISA Section 103(a)(3)(C), our audits need not extend to any statements or information related to assets held for investment of the Plan (investment information) by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA (qualified institution).

Management has obtained certifications from a qualified institution as of December 31, 2023 and 2022, and for the year ended December 31, 2023, stating that the certified investment information, as described in Note 9 to the financial statements, is complete and accurate.

Opinion

In our opinion, based on our audits and on the procedures performed as described in the Auditor’s Responsibilities for the Audit of the Financial Statements section

- the amounts and disclosures in the accompanying financial statements, other than those agreed to or derived from the certified investment information, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.
- the information in the accompanying financial statements related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our ERISA Section 103(a)(3)(C) audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free

from material misstatement, whether due to fraud or error. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Management is also responsible for maintaining a current plan instrument, including all plan amendments, administering the Plan, and determining that the Plan's transactions that are presented and disclosed in the financial statements are in conformity with the Plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditor's Responsibilities for the Audit of the Financial Statements

Except as described in the Scope and Nature of the ERISA Section 103(a)(3)(C) Audit section of our report, our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

Our audits did not extend to the certified investment information, except for obtaining and reading the certification, comparing the certified investment information with the related information presented and disclosed in the financial statements, and reading the disclosures relating to the certified investment information to assess whether they are in accordance with the presentation and disclosure requirements of accounting principles generally accepted in the United States of America.

Accordingly, the objective of an ERISA Section 103(a)(3)(C) audit is not to express an opinion about whether the financial statements as a whole are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Other Matter

Supplemental Schedule Required by ERISA

The supplemental schedule of assets (held at end of year) as of December 31, 2023, (referred to as the “supplemental schedule”), is presented for purposes of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information included in the supplemental schedule, other than that agreed to or derived from the certified investment information, has been subjected to auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with GAAS. For information included in the supplemental schedule that agreed to or is derived from the certified investment information, we compared such information to the related certified investment information.

In forming our opinion on the supplemental schedule, we evaluated whether the supplemental schedule, other than the information agreed to or derived from the certified investment information, including its form and content, is presented in conformity with the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA.

In our opinion

- the form and content of the supplemental schedule, other than the information in the supplemental schedule that agreed to or is derived from the certified investment information, are presented, in all material respects, in conformity with the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA.
- the information in the supplemental schedule related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Ernst & Young LLP

July 26, 2024

Statements of Net Assets Available for Benefits

December 31, 2023 and 2022

	December 31, 2023	December 31, 2022
Plan Investments at fair value:		
Mutual fund investments	\$ 591,279,272	\$ 462,652,560
Loans to participants	905,049	908,420
Net Assets Available for Benefits	\$ 592,184,321	\$ 463,560,980

The accompanying notes are an integral part of these statements.

Statement of Changes in Net Assets Available for Benefits

Year Ended December 31, 2023

Additions

Net appreciation in the fair value of mutual fund investments	\$ 75,893,032
Participants' contributions	33,903,273
Employers' contributions, net of forfeitures	10,876,546
Rollover contributions	4,709,397
Dividend income	15,083,649
Interest on loans to participants	58,973
Other income	12,635

Total Additions	140,537,505
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Deductions

Distributions and withdrawals	(11,881,923)
Corrective distributions	(32,241)

Total Deductions	(11,914,164)
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Net Increase	128,623,341
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Net Assets Available for Benefits:

Beginning of Year	463,560,980
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End of Year	\$ 592,184,321
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The accompanying notes are an integral part of this statement.

Notes to Financial Statements

December 31, 2023 and 2022

1. Description of the Plan

The following description of the D. E. Shaw & Co. 401(k) Plan (the “Plan”) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan’s provisions.

a. General

The Plan, which became effective January 1, 1990, is a defined contribution plan which covers all eligible employees or partners, who are age twenty-one or older, of D. E. Shaw & Co., L.P.; D. E. Shaw Research, LLC; D. E. Shaw & Co., Inc.; D. E. Shaw & Co. II, Inc.; D. E. Shaw & Co., L.L.C.; D. E. Shaw Technology Development, LLC; D. E. Shaw International Operations, L.L.C.; D. E. Shaw Staff, LLC; D. E. Shaw International Development, L.L.C.; Arcesium LLC; D. E. Shaw Renewable Investments, L.L.C.; DESRI Holdings, L.P.; DESRI Project Management Services, L.L.C.; Picularium, LLC; and DESRES Sub 1, LLC (together the “Plan Companies”). There is no service requirement to join the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”). D. E. Shaw & Co., L.P. (the “Plan Administrator” and the “Plan Sponsor”) is both the administrator and the sponsor of the Plan.

b. Contributions

Participants can contribute up to 60 percent of their compensation, as defined, to the Plan. Participant contributions were limited to \$22,500 of pre-tax and Roth 401(k) contributions in 2023. Participants who have attained age 50 before the end of the Plan year were eligible to make catch-up contributions up to \$7,500. A participant may, with consent of the Plan Administrator, make a rollover contribution from a previously qualified plan. Effective January 1, 2023, the Plan was amended such that the Plan Companies make matching contributions that are limited to the lesser of (i) 50 percent of the participant’s contribution, (ii) 12 percent of such participant’s eligible compensation, or (iii) \$10,000. Catch-up contributions are not eligible for employer-matching.

The Plan Administrator will automatically contribute six percent of a new employee’s eligible compensation into the Plan unless the employee has affirmatively elected not to participate in such automatic contributions or has affirmatively elected to contribute a different amount. These contributions will be treated as pre-tax deferrals and will automatically be deducted from the employee’s eligible compensation and contributed to the Plan on the employee’s behalf. This amount will be increased each year by 1 percent up to a maximum of 24 percent and the automatic increase will occur during the first payroll in March. Once an employee does make an election to contribute to the Plan, the Plan Administrator will no longer make the automatic one percent increase.

With the consent of the Plan Administrator, the Plan also allows participants to contribute after-tax compensation up to \$33,500 in 2023, subject to certain restrictions. This after-tax contribution is not eligible for employer-matching.

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

1. Description of the Plan (Continued)

c. Funding

The Plan Administrator submits the employers' matching contributions with the participants' contributions on a per pay-period basis, with any additional amounts processed by year-end that are necessary to true-up to arrive at the employers' contributions as calculated on an annual basis.

d. Vesting

Participants are always fully vested in their participant contributions and the respective investment income, and gains and losses thereon. Employer contributions to participants' accounts under the Plan are vested ratably in 25 percent installments over 4 years based on employment. After an employee reaches their 4-year anniversary, employer contributions are 100 percent vested. Generally, if a participant's employment with the Plan Companies terminates and the participant is less than 100 percent vested, the participant will forfeit the non-vested portion.

e. Forfeitures

For the year ended December 31, 2023, employer contributions were reduced by approximately \$179,000 from forfeitures applied. As of December 31, 2023, approximately \$83,000 was available to reduce employer contributions or Plan-related administrative expenses within the next 12 months following the Plan's year-end.

f. Participant Accounts

Each participant's account is credited (debited) with the participant's and the employer's contributions and the respective investment gains (losses) thereon. Allocations of gains (losses) are based on participant account balances. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

g. Trusteeship

The trustee and Plan recordkeeper is Vanguard Fiduciary Trust Company ("Vanguard"). The Plan's investments are held by Vanguard under a trust agreement.

h. Investment Options

Participants may direct employer and participant contributions in any of the mutual fund investment options (the "Plan Investments") presented in Note 3. Participants can invest in funds in increments of one percent. Participants may change their designation of investment options on a daily basis, subject to certain restrictions imposed by individual Plan Investments.

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

1. Description of the Plan (Continued)

i. Loans to Participants

Generally, participants may borrow from their participant accounts a minimum of \$1,000 and a maximum that cannot exceed the lesser of \$50,000 or 50 percent of their vested account balance. Loan terms cannot exceed five years unless the loan is for the purchase of the participant's principal residence, in which case the loan terms can extend to ten years. The loans are secured by the balance in the participant's account and bear interest at the prime lending rate in effect on the day the loan is approved, plus one percent. Principal and interest are paid ratably through payroll deductions. There were 48 loans outstanding on December 31, 2023 and 43 loans outstanding on December 31, 2022. If a participant with an outstanding loan ceases to be an employee, the loan will be required to be paid in full by the end of the quarter following the quarter of the employee's termination date. If the participant does not repay the loan by this deadline, the loan will be considered in default and the participant's individual account will be reduced by the outstanding amount of the loan before their final distribution from the Plan.

j. Payment of Benefits

On termination of service due to disability, retirement, or termination of employment, a participant may make an affirmative distribution election to receive a lump sum distribution equal to the vested value of the participant's account. In the event of death, the participant's beneficiary will receive the distribution upon making an affirmative distribution election.

If a participant's vested account balance is less than \$1,000 on termination of service, the participant will receive a lump-sum distribution as soon as practicable after the participant's termination of employment, without the requirement of any affirmative distribution election.

If a participant's vested account balance is more than \$1,000 and less than \$5,000 on termination of service, and after receiving all required notices, the participant does not make an affirmative distribution election, the distribution will be automatically rolled over by the Plan to an Individual Retirement Account with Vanguard as soon as practicable after the participant's termination of service. If a participant's vested account balance is more than \$5,000 on termination of service, and after receiving all required notices, the participant does not make an affirmative distribution election, the participant's funds will be left in the Plan until the participant makes an affirmative distribution election.

Upon attaining age 59 1/2, a participant may request a penalty-free withdrawal of all or a portion of the participant's vested account balance.

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

1. Description of the Plan (Continued)

j. Payment of Benefits (Continued)

A participant who suffers a financial hardship may request a withdrawal of all or a portion of their participant contributions. A financial hardship, as defined by the Plan, is limited to 1) expenses related to tuition for the participant or dependents of the participant; 2) expenses related to the purchase of a principal residence (excluding mortgage payments); 3) medical expenses; 4) expenses related to the need to prevent eviction from a principal residence; 5) funeral expenses for the parents, spouse, or dependents of the participant; or 6) expenses to repair the principal residence that would qualify for a casualty loss deduction. The participant is not required to obtain all loans and withdrawals available under the Plan before a hardship withdrawal is approved. A participant who takes a hardship withdrawal is eligible to contribute to the Plan for any period of time following the withdrawal unless the participant received a hardship withdrawal prior to the beginning of the 2019 Plan year.

k. Expenses

Expenses associated with the administration of the Plan may be paid for by the Plan or the Plan Sponsor, as permitted by the terms of the Plan.

l. In-Plan Roth Rollover Option

The Plan allows participants to roll over any amount of a participants' vested account balance (including pre-tax contributions, after-tax contributions, employer contributions, and earnings on those contributions) into a Roth account held within the Plan.

2. Summary of Accounting Policies

a. Basis of Presentation, Management Estimates, and Assumptions

The Plan's financial statements are prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"), which may require management to use its judgment in making certain estimates. Due to uncertainties inherent in any estimation process, it is expected that such estimates may differ from the amounts ultimately realized, and the differences may be material.

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

2. Summary of Accounting Policies (Continued)

b. Investments

Substantially all of the Plan's assets and liabilities are carried at fair value. U.S. GAAP defines fair value and establishes a fair value hierarchy ("Fair Value Measurement"), as discussed further below. Fair value is the price that would be received to sell an asset or paid to transfer a liability (i.e., an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair Value Measurement gives the highest priority to observable inputs and the lowest priority to unobservable inputs. Observable inputs are inputs that are developed using market data, such as publicly available information about actual events or transactions, and reflect the assumptions market participants would use when pricing an asset or liability. Unobservable inputs are inputs for which market data is not available and that are developed using the best information available about the assumptions that market participants would use when pricing an asset or liability. In accordance with Fair Value Measurement, the Plan Companies maximize the use of relevant observable inputs and minimize the use of unobservable inputs in determining the fair value of its assets and liabilities, and classify such assets and liabilities within the three levels of the fair value hierarchy, as described in the following paragraphs.

i. Level 1: Financial instruments valued using unadjusted, quoted market prices in active markets for identical assets or liabilities.

ii. Level 2: Financial instruments valued using observable inputs other than Level 1 inputs, such as quoted market prices for similar assets or liabilities, quoted market prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

iii. Level 3: Financial instruments valued using unobservable inputs that are significant to the determination of the fair value of the assets or liabilities.

Mutual fund investments consist of shares of registered investment companies. The shares of registered investment companies are valued at the last reported net asset value on the last business day of the Plan year based on quoted market prices. Purchases and sales of securities are recorded on a trade date basis. The cost of securities sold is based on average cost.

Investment gains (losses) are credited (debited) to participant accounts daily. Net appreciation (depreciation) includes the Plan's net gains (losses) on investments bought and sold as well as held during the year. Interest income is recorded on an accrual basis. Dividends are recorded on the ex-dividend date.

Benefits are recorded when paid.

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

2. Summary of Accounting Policies (Continued)

c. Loans to Participants

Loans to participants are recorded at their unpaid principal balance plus any accrued and unpaid interest. Interest income on loans to participants is recorded when it is earned.

Related fees are recorded as administrative expenses and are expensed when they are incurred. No allowance for credit losses has been recorded as of December 31, 2023 or 2022. If a participant ceases to make loan repayments and the Plan Administrator deems the participant loan to be a distribution, the participant loan balance is reduced and a benefit payment is recorded.

3. Investments

Plan Investments disclosed in the accompanying financial statements as of December 31, 2023 and 2022 and the supplemental schedule as of December 31, 2023, and net appreciation in fair value of Plan Investments for the year ended December 31, 2023, was obtained or derived from information provided to the Plan Administrator and certified as complete and accurate by Vanguard.

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

3. Investments (Continued)

The fair values of the Plan Investments as of December 31, 2023 are as follows:

Mutual Fund Investments:

Vanguard Institutional Index Fund Institutional Plus Shares	\$ 147,133,579
Vanguard Mid-Cap Index Fund Institutional Shares	45,154,393
Vanguard Target Retirement 2050 Fund	43,702,998
Vanguard Target Retirement 2045 Fund	38,441,711
Vanguard Total Stock Market Index Fund Institutional Shares	36,139,478
Vanguard Target Retirement 2055 Fund	35,107,773
Vanguard Total International Stock Index Fund Institutional Shares	34,563,956
Vanguard Small-Cap Index Fund Institutional Shares	31,778,118
Vanguard Target Retirement 2040 Fund	24,678,674
Vanguard Target Retirement 2060 Fund	23,567,760
Vanguard Total Bond Market Index Fund Institutional Shares	20,228,136
Vanguard Target Retirement 2035 Fund	18,351,485
Vanguard Treasury Money Market Fund	14,009,543
Vanguard REIT Index Fund Institutional Shares	13,865,214
Vanguard Target Retirement 2030 Fund	10,593,417
Vanguard High Dividend Yield Index Fund Admiral Shares	7,418,038
Vanguard Target Retirement 2065 Fund	7,096,367
Vanguard Target Retirement 2025 Fund	6,704,542
Vanguard Developed Markets Index Fund Institutional Shares	6,524,328
Vanguard Inflation-Protected Securities Fund Institutional Shares	6,041,775
Vanguard Emerging Markets Stock Index Fund Institutional Shares	5,514,343
Vanguard Short-Term Investment-Grade Fund Admiral Shares	3,251,936
Vanguard Target Retirement Income Fund	2,844,044
Vanguard Long-Term Treasury Index Fund Admiral Shares	2,496,779
Vanguard Intermediate-Term Treasury Index Fund Admiral Shares	2,314,703
Vanguard Target Retirement 2020 Fund	1,957,451
Vanguard High-Yield Corporate Fund Admiral Shares	918,965
Vanguard Total International Bond Index Fund Admiral Shares	758,466
Vanguard Target Retirement 2070 Fund	121,300

\$ 591,279,272

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

3. Investments (Continued)

The fair values of the Plan Investments as of December 31, 2022 were as follows:

Mutual Fund Investments:

Vanguard Institutional Index Fund Institutional Plus Shares	\$ 109,846,059
Vanguard Mid-Cap Index Fund Institutional Shares	38,718,038
Vanguard Target Retirement 2050 Fund	32,039,414
Vanguard Target Retirement 2045 Fund	29,952,581
Vanguard Total International Stock Index Fund Institutional Shares	29,321,518
Vanguard Small-Cap Index Fund Institutional Shares	25,937,515
Vanguard Total Stock Market Index Fund Institutional Shares	25,885,627
Vanguard Target Retirement 2055 Fund	24,155,537
Vanguard Total Bond Market Index Fund Institutional Shares	18,373,980
Vanguard Target Retirement 2040 Fund	18,255,006
Vanguard Treasury Money Market Fund	15,842,727
Vanguard Target Retirement 2060 Fund	14,818,464
Vanguard Target Retirement 2035 Fund	14,106,126
Vanguard REIT Index Fund Institutional Shares	12,882,686
Vanguard Target Retirement 2030 Fund	8,376,365
Vanguard High Dividend Yield Index Fund Admiral Shares	6,884,877
Vanguard Emerging Markets Stock Index Fund Institutional Shares	5,871,369
Vanguard Inflation-Protected Securities Fund Institutional Shares	5,854,936
Vanguard Developed Markets Index Fund Admiral Shares	5,271,093
Vanguard Target Retirement 2025 Fund	5,162,729
Vanguard Target Retirement 2065 Fund	3,239,483
Vanguard Target Retirement Income Fund	2,648,368
Vanguard Short-Term Investment-Grade Fund Admiral Shares	2,645,056
Vanguard Target Retirement 2020 Fund	1,990,655
Vanguard Intermediate-Term Treasury Index Fund Admiral Shares	1,831,884
Vanguard Long-Term Treasury Index Fund Admiral Shares	1,700,393
Vanguard Total International Bond Index Fund Admiral Shares	636,873
Vanguard High-Yield Corporate Fund Admiral Shares	390,277
Vanguard Target Retirement 2070 Fund	12,924
	\$ 462,652,560

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

4. Related Party Transactions

As of December 31, 2023 and 2022, the Plan Investments were managed by Vanguard. Vanguard is the trustee of the Plan and, as such, these transactions qualified as party-in-interest transactions. Fees paid by the Plan to Vanguard amounted to approximately \$20,000 for the year ended December 31, 2023 and are included under distributions and withdrawals on the statement of changes in net assets available for benefits.

5. Plan Termination

Although they have not expressed any intent to do so, the Plan Companies have the right under the Plan to discontinue their matching contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of a Plan termination, participants will become 100 percent vested in their accounts, including the matching contributions by the respective Plan Company.

6. Tax Status

The underlying pre-approved plan has received an opinion letter from the Internal Revenue Service (“IRS”) dated June 30, 2020 stating that the written form of the underlying pre-approved document is qualified under Section 401 of the Internal Revenue Code (the “Code”). Any employer adopting this form of the plan will be considered to have a plan qualified under Section 401 of the Code, and therefore, the related trust is tax exempt. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualified status. The Plan Administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believes that the Plan is qualified and the related trust is tax exempt.

The Plan Administrator accounts for the effect of any uncertain tax positions in its financial statements. The Plan Administrator measures such tax positions against the more-likely-than-not threshold, based on whether those positions would be expected to be sustained if examined by the IRS. With respect to any tax positions that do not meet the more-likely-than-not threshold, the Plan records a corresponding liability in the financial statements, though no liabilities or expenses, including interest and penalties, were deemed necessary for recording during the year. The Plan may be subject to examination by the IRS; however, there are currently no audits for any tax periods in progress.

7. Fair Value Measurement

In accordance with Fair Value Measurement, the Plan assets, which consisted of mutual fund investments, are categorized as Level 1.

Notes to Financial Statements (Continued)

December 31, 2023 and 2022

8. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

9. Information Certified by the Trustee

The following investment information included in the financial statements and supplemental schedule have been certified by Vanguard in accordance with 29 CFR 2520.103-8 of the Department of Labor's rules and regulations for reporting and disclosure under ERISA:

- Schedule of Assets (Held at End of Year) as of December 31, 2023
- Investments as of December 31, 2023 and 2022
- Loans to participants as of December 31, 2023
- Net appreciation in the fair value of mutual fund investments for the year ended December 31, 2023
- Investment income for the year ended December 31, 2023
- Interest on loans to participants for the year ended December 31, 2023

10. Subsequent Events

The Plan has evaluated events subsequent to December 31, 2023 through July 26, 2024, the date the financial statements were available to be issued, and there is nothing material to disclose.

Supplemental Schedule

Schedule of Assets (Held at End of Year)

Schedule H, Line 4i

December 31, 2023

<i>Description of Plan Investments</i>	<i>Shares</i>	<i>Fair Value</i>
Vanguard Institutional Index Fund Institutional Plus Shares	373,938	\$ 147,133,579
Vanguard Mid-Cap Index Fund Institutional Shares	709,528	45,154,393
Vanguard Target Retirement 2050 Fund	983,416	43,702,998
Vanguard Target Retirement 2045 Fund	1,441,925	38,441,711
Vanguard Total Stock Market Index Fund Institutional Shares	312,869	36,139,478
Vanguard Target Retirement 2055 Fund	707,961	35,107,773
Vanguard Total International Stock Index Fund Institutional Shares	277,622	34,563,956
Vanguard Small-Cap Index Fund Institutional Shares	310,971	31,778,118
Vanguard Target Retirement 2040 Fund	627,956	24,678,674
Vanguard Target Retirement 2060 Fund	515,819	23,567,760
Vanguard Total Bond Market Index Fund Institutional Shares	2,083,227	20,228,136
Vanguard Target Retirement 2035 Fund	829,633	18,351,485
Vanguard Treasury Money Market Fund	14,009,543	14,009,543
Vanguard REIT Index Fund Institutional Shares	715,809	13,865,214
Vanguard Target Retirement 2030 Fund	298,658	10,593,417
Vanguard High Dividend Yield Index Fund Admiral Shares	220,447	7,418,038
Vanguard Target Retirement 2065 Fund	236,940	7,096,367
Vanguard Target Retirement 2025 Fund	364,774	6,704,542
Vanguard Developed Markets Index Fund Institutional Shares	422,834	6,524,328
Vanguard Inflation-Protected Securities Fund Institutional Shares	644,112	6,041,775
Vanguard Emerging Markets Stock Index Fund Institutional Shares	212,253	5,514,343
Vanguard Short-Term Investment-Grade Fund Admiral Shares	317,882	3,251,936
Vanguard Target Retirement Income Fund	218,604	2,844,044
Vanguard Long-Term Treasury Index Fund Admiral Shares	120,385	2,496,779
Vanguard Intermediate-Term Treasury Index Fund Admiral Shares	115,504	2,314,703
Vanguard Target Retirement 2020 Fund	72,849	1,957,451
Vanguard High-Yield Corporate Fund Admiral Shares	169,551	918,965
Vanguard Total International Bond Index Fund Admiral Shares	38,462	758,466
Vanguard Target Retirement 2070 Fund	5,118	121,300
Total Plan Investments (see notes below)		591,279,272
Loans to Participants		
(Interest rate of 4.25%-9.50%, maturity dates ranging from February 2024 to December 2029)		905,049
Total Plan Investments and Loans to Participants		\$ 592,184,321

Notes:

1. The Plan Investments above qualify as party-in-interest transactions.
2. Cost information is not required because Plan Investments are participant directed.