

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K**

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended May 31, 2023

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 1-7102

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION

(Exact name of registrant as specified in its charter)

District of Columbia

(State or other jurisdiction of incorporation or organization)

52-0891669

(I.R.S. employer identification no.)

20701 Cooperative Way, Dulles, Virginia, 20166

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(703) 467-1800**

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Each Exchange on Which Registered</u>
7.35% Collateral Trust Bonds, due 2026	NRUC 26	New York Stock Exchange
5.50% Subordinated Notes, due 2064	NRUC	New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C.7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officer's during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

The Registrant is a tax-exempt cooperative and therefore does not issue capital stock.

TABLE OF CONTENTS

	<u>Page</u>
<u>PART I</u>	
<u>Item 1.</u>	<u>Business</u> 1
	<u>Overview</u> 1
	<u>Our Business</u> 2
	<u>Members</u> 3
	<u>Loan and Guarantee Programs</u> 5
	<u>Investment Policy</u> 8
	<u>Industry</u> 9
	<u>Lending Competition</u> 10
	<u>Regulation</u> 12
	<u>Human Capital Management</u> 12
	<u>Corporate Responsibility</u> 14
	<u>Available Information</u> 15
<u>Item 1A.</u>	<u>Risk Factors</u> 15
<u>Item 1B.</u>	<u>Unresolved Staff Comments</u> 22
<u>Item 2.</u>	<u>Properties</u> 22
<u>Item 3.</u>	<u>Legal Proceedings</u> 22
<u>Item 4.</u>	<u>Mine Safety Disclosures</u> 22
<u>PART II</u>	
<u>Item 5.</u>	<u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u> 22
<u>Item 6.</u>	<u>Reserved</u> 22
<u>Item 7.</u>	<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”)</u> 23
	<u>Introduction</u> 23
	<u>Summary of Selected Financial Data</u> 23
	<u>Executive Summary</u> 26
	<u>Critical Accounting Estimates</u> 33
	<u>Recent Accounting Changes and Other Developments</u> 35
	<u>Consolidated Results of Operations</u> 35
	<u>Consolidated Balance Sheet Analysis</u> 43
	<u>Enterprise Risk Management</u> 49
	<u>Credit Risk</u> 50
	<u>Liquidity Risk</u> 61
	<u>Market Risk</u> 72
	<u>Operational Risk</u> 75
	<u>Non-GAAP Financial Measures</u> 77
<u>Item 7A.</u>	<u>Quantitative and Qualitative Disclosures About Market Risk</u> 81
<u>Item 8.</u>	<u>Financial Statements and Supplementary Data</u> 82
	<u>Report of Independent Registered Public Accounting Firm</u> 83
	<u>Consolidated Statements of Operations</u> 86
	<u>Consolidated Statements of Comprehensive Income</u> 87
	<u>Consolidated Balance Sheets</u> 88
	<u>Consolidated Statements of Changes in Equity</u> 89

	<u>Page</u>
<u>Consolidated Statements of Cash Flows</u>	<u>90</u>
<u>Notes to Consolidated Financial Statements</u>	<u>92</u>
<u>Note 1 — Summary of Significant Accounting Policies</u>	<u>92</u>
<u>Note 2 — Interest Income and Interest Expense</u>	<u>102</u>
<u>Note 3 — Investment Securities</u>	<u>102</u>
<u>Note 4 — Loans</u>	<u>104</u>
<u>Note 5 — Allowance for Credit Losses</u>	<u>117</u>
<u>Note 6 — Short-Term Borrowings</u>	<u>119</u>
<u>Note 7 — Long-Term Debt</u>	<u>120</u>
<u>Note 8 — Subordinated Deferrable Debt</u>	<u>123</u>
<u>Note 9 — Members’ Subordinated Certificates</u>	<u>124</u>
<u>Note 10 — Derivative Instruments and Hedging Activities</u>	<u>126</u>
<u>Note 11 — Equity</u>	<u>130</u>
<u>Note 12 — Employee Benefits</u>	<u>133</u>
<u>Note 13 — Guarantees</u>	<u>134</u>
<u>Note 14 — Fair Value Measurement</u>	<u>136</u>
<u>Note 15 — Variable Interest Entities</u>	<u>140</u>
<u>Note 16 — Business Segments</u>	<u>142</u>
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>146</u>
<u>Item 9A. Controls and Procedures</u>	<u>146</u>
<u>Item 9B. Other Information</u>	<u>147</u>
<u>Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections</u>	<u>147</u>
 <u>PART III</u>	
<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	<u>148</u>
<u>Item 11. Executive Compensation</u>	<u>158</u>
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>169</u>
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>169</u>
<u>Item 14. Principal Accountant Fees and Services</u>	<u>172</u>
 <u>PART IV</u>	
<u>Item 15. Exhibit and Financial Statement Schedules</u>	<u>173</u>
<u>Item 16. Form 10-K Summary</u>	<u>177</u>
 <u>SIGNATURES</u>	 <u>178</u>

CROSS REFERENCE INDEX OF MD&A TABLES

Table	Description	Page
1	Summary of Selected Financial Data	24
2	Average Balances, Interest Income/Interest Expense and Average Yield/Cost	36
3	Rate/Volume Analysis of Changes in Interest Income/Interest Expense	38
4	Non-Interest Income	40
5	Derivative Gains (Losses)	41
6	Comparative Swap Curves	42
7	Non-Interest Expense	43
8	Loans—Outstanding Amount by Member Class and Loan Type	44
9	Debt—Debt Product Types	45
10	Debt—Total Debt Outstanding and Weighted-Average Interest Rates	46
11	Debt—Member Investments	47
12	Equity	48
13	Loans—Loan Portfolio Security Profile	52
14	Loans—Loan Exposure to 20 Largest Borrowers	53
15	Loans—Loan Exposure to Texas-Based Borrowers	54
16	Loans—Loan Geographic Concentration	55
17	Loans—Troubled Debt Restructured Loans	56
18	Loans—Nonperforming Loans	57
19	Allowance for Credit Losses by Borrower Member Class and Evaluation Methodology	59
20	Available Liquidity	62
21	Liquidity Coverage Ratios	63
22	Committed Bank Revolving Line of Credit Agreements	64
23	Short-Term Borrowings—Outstanding Amount and Weighted-Average Interest Rates	66
24	Short-Term Borrowings—Funding Sources	66
25	Long-Term and Subordinated Debt— Issuances and Repayments	67
26	Collateral Pledged	68
27	Loans—Unencumbered Loans	68
28	Loans—Maturities of Scheduled Principal Payments	69
29	Contractual Obligations	70
30	Liquidity—Projected Long-Term Sources and Uses of Funds	71
31	Credit Ratings	71
32	Interest Rate Sensitivity Analysis	73
33	LIBOR-Indexed Financial Instruments	75
34	Adjusted Net Income	78
35	TIER and Adjusted TIER	78
36	Adjusted Liabilities and Equity	80
37	Debt-to-Equity Ratio and Adjusted Debt-to-Equity Ratio	81
38	Members' Equity	81

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K for the fiscal year ended May 31, 2023 (“this Report” or “2023 Form 10-K”) contains certain statements that are considered “forward-looking statements” as defined in and within the meaning of the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements do not represent historical facts or statements of current conditions. Instead, forward-looking statements represent management’s current beliefs and expectations, based on certain assumptions and estimates made by, and information available to, management at the time the statements are made, regarding our future plans, strategies, operations, financial results or other events and developments, many of which, by their nature, are inherently uncertain and outside our control. Forward-looking statements are generally identified by the use of words such as “intend,” “plan,” “may,” “should,” “will,” “project,” “estimate,” “anticipate,” “believe,” “expect,” “continue,” “potential,” “opportunity” and similar expressions, whether in the negative or affirmative. All statements about future expectations or projections, including statements about loan volume, the adequacy of the allowance for credit losses, operating income and expenses, leverage and debt-to-equity ratios, borrower financial performance, impaired loans, and sources and uses of liquidity, are forward-looking statements. Although we believe the expectations reflected in our forward-looking statements are based on reasonable assumptions, actual results and performance may differ materially from our forward-looking statements. Therefore, you should not place undue reliance on any forward-looking statement and should consider the risks and uncertainties that could cause our current expectations to vary from our forward-looking statements, including, but not limited to, legislative changes that could affect our tax status and other matters, demand for our loan products, lending competition, changes in the quality or composition of our loan portfolio, changes in our ability to access external financing, changes in the credit ratings on our debt, valuation of collateral supporting impaired loans, charges associated with our operation or disposition of foreclosed assets, nonperformance of counterparties to our derivative agreements, economic conditions and regulatory or technological changes within the rural electric industry, the costs and impact of legal or governmental proceedings involving us or our members, general economic conditions, governmental monetary and fiscal policies, the occurrence and effect of natural disasters, including severe weather events or public health emergencies, and the factors listed and described under “Item 1A. Risk Factors” in this Report. Forward-looking statements speak only as of the date they are made, and, except as required by law, we undertake no obligation to update any forward-looking statement to reflect the impact of events, circumstances or changes in expectations that arise after the date any forward-looking statement is made.

PART I

Item 1. Business

OVERVIEW

Our financial statements include the consolidated accounts of National Rural Utilities Cooperative Finance Corporation (“CFC”), National Cooperative Services Corporation (“NCSC”) and Rural Telephone Finance Cooperative (“RTFC”). Our principal operations are currently organized for management reporting purposes into three business segments, which are based on the accounts of each of the legal entities included in our consolidated financial statements and discussed below.

The business affairs of CFC, NCSC and RTFC are governed by separate boards of directors for each entity. We provide information on CFC’s corporate governance in “Item 10. Directors, Executive Officers and Corporate Governance.” We provide information on the members of each of these entities below in “Item 1. Business—Members” and describe the financing products offered to members by each entity under “Item 1. Business—Loan and Guarantee Programs.” Information on the financial performance of our business segments is disclosed in “Note 16—Business Segments.” Unless stated otherwise, references to “we,” “our” or “us” relate to CFC and its consolidated entities. All references to members within this document include members, associates and affiliates of CFC and its consolidated entities, except where indicated otherwise.

CFC

CFC is a member-owned, nonprofit finance cooperative association incorporated under the laws of the District of Columbia in April 1969. CFC’s principal purpose is to provide its members and associates with financing to supplement the loan programs of the Rural Utilities Service (“RUS”) of the United States Department of Agriculture (“USDA”). CFC extends

loans to its rural electric members for construction, acquisitions, system and facility repairs and maintenance, enhancements and ongoing operations to support the goal of electric distribution and generation and transmission (“power supply”) systems of providing reliable, affordable power to the customers they serve. CFC also provides its members and associates with credit enhancements in the form of letters of credit and guarantees of debt obligations. As a cooperative, CFC is owned by and exclusively serves its membership, which consists of not-for-profit entities or subsidiaries or affiliates of not-for-profit entities. CFC is exempt from federal income taxes under Section 501(c)(4) of the Internal Revenue Code. As a member-owned cooperative, CFC’s objective is not to maximize profit, but rather to offer members cost-based financial products and services. As described below under “Allocation and Retirement of Patronage Capital,” CFC annually allocates its net earnings, which consist of net income excluding the effect of certain noncash accounting entries, to: (i) a cooperative educational fund; (ii) a general reserve, if necessary; (iii) members based on each member’s patronage of CFC’s loan programs during the year; and (iv) a members’ capital reserve. CFC funds its activities primarily through a combination of public and private issuances of debt securities, member investments and retained equity. As a Section 501(c)(4) tax-exempt, member-owned cooperative, CFC cannot issue equity securities.

NCSC

NCSC is a taxable cooperative incorporated in 1981 in the District of Columbia as a member-owned cooperative association. The principal purpose of NCSC is to provide financing to its members, entities eligible to be members of CFC and the for-profit and not-for-profit entities that are owned, operated or controlled by, or provide significant benefit to Class A, B and C members of CFC. See “Members” below for a description of our member classes. NCSC’s membership consists of distribution systems, power supply systems and statewide and regional associations that were members of CFC as of May 31, 2023. CFC, which is the primary source of funding for NCSC, manages NCSC’s business operations under a management agreement that is automatically renewable on an annual basis unless terminated by either party. NCSC pays CFC a fee and, in exchange, CFC reimburses NCSC for loan losses under a guarantee agreement. As a taxable cooperative, NCSC pays income tax based on its reported taxable income and deductions. NCSC is headquartered with CFC in Dulles, Virginia.

RTFC

RTFC is a taxable Subchapter T cooperative association originally incorporated in South Dakota in 1987 and reincorporated as a member-owned cooperative association in the District of Columbia in 2005. RTFC’s principal purpose is to provide financing for its rural telecommunications members and their affiliates. RTFC’s membership consists of a combination of not-for-profit and for-profit entities. CFC is the sole lender to and manages RTFC’s business operations through a management agreement that is automatically renewable on an annual basis unless terminated by either party. RTFC pays CFC a fee and, in exchange, CFC reimburses RTFC for loan losses under a guarantee agreement. As permitted under Subchapter T of the Internal Revenue Code, RTFC pays income tax based on its taxable income, excluding patronage-sourced earnings allocated to its patrons. RTFC is headquartered with CFC in Dulles, Virginia.

In April 2023 and June 2023, RTFC’s and NCSC’s members, respectively, approved the sale of RTFC’s business to NCSC. We intend to complete the consolidation of RTFC and NCSC over the next 12 months, subject to meeting certain closing conditions. As part of the consolidation, CFC intends to retire CFC’s allocated but unretired patronage capital to RTFC at a discount, which we expect to occur during the second quarter of fiscal year 2024, and subsequently, RTFC intends to retire the allocated but unretired patronage capital to its members at a discount.

OUR BUSINESS

CFC was established by and for the rural electric cooperative network to provide affordable financing alternatives to electric cooperatives. While our business strategy and policies are set by the CFC Board of Directors and may be amended or revised from time to time, the fundamental goal of our overall business model is to work with our members to ensure that CFC is able to meet their financing needs, as well as provide industry expertise and strategic services to aid them in delivering affordable and reliable essential services to their communities.

Focus on Electric Lending

As a member-owned, nonprofit finance cooperative, our primary objective is to provide our members with the credit products they need to fund their operations. As such, we primarily focus on lending to electric systems and securing access to capital through diverse funding sources at rates that allow us to offer cost-based credit products to our members. Rural electric cooperatives, most of which are not-for-profit entities, were established to provide electricity in rural areas historically deemed too costly to be served by investor-owned utilities. As such, our electric cooperative members experience limited competition because they generally operate in exclusive territories, the majority of which are not rate regulated. Loans to electric utility organizations accounted for approximately 99% and 98% of our total loans outstanding as of May 31, 2023 and 2022, respectively. Substantially all of our electric cooperative borrowers continued to demonstrate stable operating performance and strong financial ratios as of May 31, 2023.

Maintain Diversified Funding Sources

We strive to maintain diversified funding sources beyond capital market offerings of debt securities. We offer various short- and long-term unsecured investment products to our members and affiliates, including commercial paper, select notes, daily liquidity fund notes, medium-term notes and subordinated certificates. We continue to issue debt securities, such as secured collateral trust bonds, unsecured medium-term notes and dealer commercial paper, in the capital markets. We also have access to funds through bank revolving line of credit arrangements, government-guaranteed programs such as funding from the Federal Financing Bank that is guaranteed by RUS through the Guaranteed Underwriter Program of the USDA (the “Guaranteed Underwriter Program”), as well as a note purchase agreement with the Federal Agricultural Mortgage Corporation (“Farmer Mac”). We provide additional information on our funding sources in “Item 7. MD&A—Consolidated Balance Sheet Analysis,” “Item 7. MD&A—Liquidity Risk,” “Note 6—Short-Term Borrowings,” “Note 7—Long-Term Debt,” “Note 8—Subordinated Deferrable Debt” and “Note 9—Members’ Subordinated Certificates.”

MEMBERS

Our consolidated membership, after taking into consideration entities that are members of both CFC and NCSC and eliminating overlapping members between CFC, NCSC and RTFC, totaled 1,426 members and 270 associates as of May 31, 2023, compared with 1,425 members and 248 associates as of May 31, 2022.

CFC

CFC lends to its members and associates and also provides credit enhancements in the form of letters of credit and guarantees of debt obligations. Membership in CFC is limited to cooperative or not-for-profit rural electric systems that are eligible to borrow from RUS under its Electric Loan Program and affiliates of these entities. CFC categorizes its members, all of which are not-for-profit entities or subsidiaries or affiliates of not-for-profit entities, into classes based on member type because the demands and needs of each member class differ. Affiliates represent holding companies, subsidiaries and other entities that are owned, controlled or operated by members. Members are not required to have outstanding loans from RUS as a condition of borrowing from CFC. CFC membership consists of members in 50 states and three U.S. territories. In addition to members, CFC has associates that are nonprofit groups or entities organized on a cooperative basis that are owned, controlled or operated by members and are engaged in or plan to engage in furnishing non-electric services primarily for the benefit of the ultimate consumers of CFC members. Associates are not eligible to vote on matters put to a vote of the membership. CFC’s members, by member class, and associates were as follows as of May 31, 2023.

[Table of Contents](#)

Member Type	CFC Member	
	Class	May 31, 2023
Distribution systems	A	843
Power supply systems	B	68
Statewide and regional associations, including NCSC ..	C	62
National association of cooperatives ⁽¹⁾	D	1
Total CFC members		974
Associates, including RTFC		45
Total CFC members and associates		1,019

⁽¹⁾ National Rural Electric Cooperative Association is our sole class D member.

NCSC

Membership in NCSC includes organizations that are Class A, B and C members of CFC, or eligible for such membership and are approved for membership by the NCSC Board of Directors. In addition to members, NCSC has associates that may include members of CFC, entities eligible to be members of CFC and for-profit and not-for-profit entities owned, controlled or operated by, or provide significant benefit to, Class A, B and C members of CFC. All of NCSC’s members also were CFC members as of May 31, 2023. CFC is not, however, a member of NCSC. NCSC’s members and associates were as follows as of May 31, 2023.

Member Type	CFC Member	
	Class	May 31, 2023
Distribution systems	A	448
Power supply systems	B	3
Statewide associations	C	6
Total NCSC members		457
Associates		220
Total NCSC members and associates		677

RTFC

Membership in RTFC is limited to cooperative corporations, not-for-profit corporations, private corporations, public corporations, utility districts and other public bodies that are approved by the RTFC Board of Directors and are actively borrowing or are eligible to borrow from RUS’s traditional infrastructure loan program. These companies must be engaged directly or indirectly in furnishing telephone services as the licensed incumbent carrier. Holding companies, subsidiaries and other organizations that are owned, controlled or operated by members, which are referred to as affiliates, are eligible to borrow from RTFC. In addition, RTFC has associates that are organizations that provide non-telephone or non-telecommunications services to rural telecommunications companies that are approved by the RTFC Board of Directors. Neither affiliates nor associates are eligible to vote on matters put to a vote of the membership. CFC and NCSC are not members of RTFC. RTFC’s members and associates were as follows as of May 31, 2023.

Member Type	May 31, 2023
Members	453
Associates	6
Total RTFC members and associates	459

LOAN AND GUARANTEE PROGRAMS

CFC lends to its members and associates and also provides credit enhancements in the form of letters of credit and guarantees of debt obligations. NCSC and RTFC also lend and provide credit enhancements to their members and associates. For information on the membership of CFC, NCSC and RTFC, see “Item 1. Business—Members.”

CFC, NCSC and RTFC loan commitments generally contain provisions that restrict borrower advances or trigger an event of default if there is any material adverse change in the business or condition, financial or otherwise, of the borrower. Below is additional information on the loan and guarantee programs offered by CFC, NCSC and RTFC.

CFC Loan Programs

Long-Term Loans

CFC’s long-term loans generally have the following characteristics:

- terms of up to 35 years on a senior secured basis and terms of up to five years on an unsecured basis;
- amortizing, bullet maturity or serial payment structures;
- the property, plant and equipment financed by and securing the long-term loan has a useful life generally equal to or in excess of the loan maturity;
- flexibility for the borrower to select a fixed interest rate for periods of one to 35 years or a variable interest rate; and
- the ability for the borrower to select various tranches with either a fixed or variable interest rate for each tranche.

Borrowers typically have the option of selecting a fixed or variable interest rate at the time of each advance on long-term loan facilities. When selecting a fixed rate, the borrower has the option to choose a fixed rate for a term of one year through the final maturity of the loan. When the selected fixed interest rate term expires, the borrower may select another fixed rate for a term of one year through the remaining loan maturity or the current variable rate.

To be in compliance with the covenants in the loan agreement and eligible for loan advances, distribution systems generally must maintain an average modified debt service coverage ratio, as defined in the loan agreement, of 1.35 or greater. CFC may make long-term loans to distribution systems, on a case-by-case basis, that do not meet this general criterion. Power supply systems generally are required: (i) to maintain an average debt service coverage ratio, as defined in the loan agreement, of 1.00 or greater; (ii) to establish and collect rates and other revenue in an amount to yield margins for interest, as defined in an indenture, in each fiscal year sufficient to equal at least 1.00; or (iii) both. CFC may make long-term loans to power supply systems, on a case-by-case basis, that may include other requirements, such as maintenance of a minimum equity level.

Line of Credit Loans

Line of credit loans are designed primarily to assist borrowers with liquidity and cash management and are generally advanced at variable interest rates. Line of credit loans are typically revolving facilities. Certain line of credit loans require the borrower to pay off the principal balance for at least five consecutive business days at least once during each 12-month period. Line of credit loans are generally unsecured and may be conditional or unconditional facilities.

Line of credit loans can be made on an emergency basis when financing is needed quickly to address weather-related or other unexpected events and can also be made available as interim financing when a member either receives RUS approval to obtain a loan and is awaiting its initial advance of funds or submits a loan application that is pending approval from RUS (sometimes referred to as “bridge loans”). In these cases, when the borrower receives the RUS loan advance, the funds must be used to repay the bridge loans.

Syndicated Line of Credit and Term Loans

Syndicated line of credit and term loans are typically large financings offered by a group of lenders that work together to provide funds for a single borrower. Syndicated loans are generally unsecured, floating-rate loans that can be provided on a

revolving or term basis for tenors that range from several months to five years. Syndicated financings are arranged for borrowers on a case-by-case basis. CFC may act as lead lender, arranger and/or administrative agent for the syndicated facilities. CFC will syndicate these line of credit facilities on a best effort basis.

NCSC Loan Programs

NCSC makes loans to electric cooperatives and their subsidiaries that provide non-electric services in the energy and telecommunication industries as well as to entities that provide substantial benefit to CFC members, including eligible solar energy providers and investor-owned utilities. Loans to NCSC associates may require a guarantee of repayment to NCSC from the CFC member cooperative with which it is affiliated.

Long-Term Loans

NCSC's long-term loans generally have the following characteristics:

- terms up to 30 years on a senior secured basis and terms of up to five years on an unsecured basis;
- amortizing, balloon, bullet maturity or serial payment structures;
- the property, plant and equipment financed by and securing the long-term loan has a useful life equal to or in excess of the loan maturity;
- flexibility for the borrower to select a fixed interest rate for periods of one to 30 years or a variable interest rate; and
- the ability for the borrower to select various tranches with either a fixed or variable interest rate for each tranche.

NCSC allows borrowers to select a fixed interest rate or a variable interest rate at the time of each advance on long-term loan facilities. When selecting a fixed rate, the borrower has the option to choose a fixed rate for a term of one year through the final maturity of the loan. When the selected fixed interest rate term expires, the borrower may select another fixed rate for a term of one year through the remaining loan maturity or the current variable rate. The fixed rate on a loan generally is determined on the day the loan is advanced or repriced based on the term selected.

Line of Credit Loans

NCSC also provides revolving line of credit loans to assist borrowers with liquidity and cash management on terms similar to those provided by CFC as described herein.

RTFC Loan Programs

RTFC primarily makes long-term loans to rural local exchange carriers or holding companies of rural local exchange carriers for debt refinancing, construction or upgrades of infrastructure, acquisitions and other corporate purposes. Most of these rural telecommunications companies have diversified their operations and also provide broadband services.

Long-Term Loans

RTFC's long-term loans generally have the following characteristics:

- terms not exceeding 10 years on a senior secured basis and terms of up to five years on an unsecured basis;
- amortizing or bullet maturity payment structures;
- the property, plant and equipment financed by and securing the long-term loan has a useful life generally equal to or in excess of the loan maturity;
- flexibility for the borrower to select a fixed interest rate for periods from one year to the final loan maturity or a variable interest rate; and
- the ability for the borrower to select various tranches with either a fixed or variable interest rate for each tranche.

When a selected fixed interest rate term expires, generally the borrower may select another fixed-rate term or the current variable rate. The fixed rate on a loan is generally determined on the day the loan is advanced or converted to a fixed rate based on the term selected. To borrow from RTFC, a rural telecommunication system generally must be able to demonstrate

the ability to achieve and maintain an annual debt service coverage ratio of 1.25. RTFC may make long-term loans to rural telecommunication systems, on a case-by-case basis, that do not meet this general criterion.

Line of Credit Loans

RTFC also provides revolving line of credit loans to assist borrowers with liquidity and cash management on terms similar to those provided by CFC as described herein.

Loan Features and Options

Interest Rates

As a member-owned cooperative finance organization, CFC is a cost-based lender. As such, our interest rates are set based on a yield that we believe will generate a reasonable level of earnings to cover our cost of funding, general and administrative expenses and provision for credit losses. Long-term fixed rates are set daily for new loan advances and loans that reprice. The fixed rate on each loan is generally determined on the day the loan is advanced or repriced based on the term selected. The variable rate is established monthly. Various standardized discounts may reduce the stated interest rates for borrowers meeting certain criteria related to performance, volume, collateral and equity requirements.

Conversion Option

Generally, a borrower may convert a long-term loan from a variable interest rate to a fixed interest rate at any time without a fee and convert a long-term loan from a fixed rate to another fixed rate or to a variable rate at any time generally subject to a make-whole premium.

Prepayment Option

Generally, borrowers may prepay long-term fixed-rate loans at any time, subject to payment of an administrative fee and a make-whole premium, and prepay long-term variable-rate loans at any time, subject to payment of an administrative fee. Line of credit loans may be prepaid at any time without a fee.

Loan Security

Long-term loans made by CFC typically are senior secured on parity with other secured lenders (primarily RUS), if any, by all assets and revenue of the borrower, subject to standard liens typical in utility mortgages such as those related to taxes, worker's compensation awards, mechanics' and similar liens, rights-of-way and governmental rights. We are able to obtain liens on parity with liens for the benefit of RUS because RUS' form of mortgage expressly provides for other lenders such as CFC to have a parity lien position if the borrower satisfies certain conditions or obtains a written lien accommodation from RUS. When we make loans to borrowers that have existing loans from RUS, we generally require those borrowers to either obtain such a lien accommodation or satisfy the conditions necessary for our loan to be secured on parity under the mortgage with the loan from RUS. As noted above, CFC line of credit loans generally are unsecured.

We provide additional information on our loan programs in the sections "Item 7. MD&A—Consolidated Balance Sheet Analysis," and "Item 7. MD&A—Credit Risk."

Guarantee Programs

When we guarantee our members' debt obligations, we use the same credit policies and monitoring procedures for guarantees as for loans. If a member system defaults in its obligation to pay debt service, then we are obligated to pay any required amounts under our guarantees. Meeting our guarantee obligations satisfies the underlying obligation of our member systems and prevents the exercise of remedies by the guarantee beneficiary based upon a payment default by a member system. The member system is required to repay any amount advanced by us with interest pursuant to the documents evidencing the member system's reimbursement obligation.

Letters of Credit

In exchange for a fee, we issue irrevocable letters of credit to support members' obligations to energy marketers, other third parties and to the USDA Rural Business-Cooperative Service. Each letter of credit is supported by a reimbursement agreement with the member on whose behalf the letter of credit was issued. In the event a beneficiary draws on a letter of credit, the agreement generally requires the member to reimburse us within one year from the date of the draw, with interest accruing from the draw date at our line of credit variable interest rate.

Guarantees of Long-Term Tax-Exempt Bonds

We guarantee debt issued for our members' construction or acquisition of pollution control, solid waste disposal, industrial development and electric distribution facilities. Governmental authorities issue such debt on a nonrecourse basis and the interest thereon is exempt from federal taxation. The proceeds of the offering are made available to the member system, which in turn is obligated to pay the governmental authority amounts sufficient to service the debt.

If a system defaults for failure to make the debt payments and any available debt service reserve funds have been exhausted, we are obligated to pay scheduled debt service under our guarantee. Such payment will prevent the occurrence of a payment default that would otherwise permit acceleration of the bond issue. The system is required to repay any amount that we advance pursuant to our guarantee plus interest on that advance. This repayment obligation, together with the interest thereon, is typically senior secured on parity with other lenders (including, in most cases, RUS), by a lien on substantially all of the system's assets. If the security instrument is a common mortgage with RUS, then in general, we may not exercise remedies for up to two years following default. However, if the debt is accelerated under the common mortgage because of a determination that the related interest is not tax-exempt, the system's obligation to reimburse us for any guarantee payments will be treated as a long-term loan. The system is required to pay us initial and/or ongoing guarantee fees in connection with these transactions.

Certain guaranteed long-term debt bears interest at variable rates that are adjusted at intervals of one to 270 days, including weekly, every five weeks or semiannually to a level favorable to their resale or auction at par. If funding sources are available, the member that issued the debt may choose a fixed interest rate on the debt. When the variable rate is reset, holders of variable-rate debt have the right to tender the debt for purchase at par. In some transactions, we have committed to purchase this debt as liquidity provider if it cannot otherwise be remarketed. If we hold the securities, the member cooperative pays us the interest earned on the bonds or interest calculated based on our short-term variable interest rate, whichever is greater. The system is required to pay us stand-by liquidity fees in connection with these transactions.

Other Guarantees

We may provide other guarantees as requested by our members. Other guarantees are generally unsecured with guarantee fees payable to us.

We provide additional information on our guarantee programs and outstanding guarantee amounts as of May 31, 2023 and 2022 in "Note 13—Guarantees."

INVESTMENT POLICY

We invest funds in accordance with policies adopted by our board of directors. Pursuant to our current investment policy, an Investment Management Committee was established to oversee and administer our investments with the objective of seeking returns consistent with the preservation of principal and to provide a supplementary source of liquidity. The Investment Management Committee may direct funds to be invested in direct obligations of, or obligations guaranteed by, the United States ("U.S.") or agencies thereof and investments in relatively short-term U.S. dollar-denominated fixed-income securities such as government-sponsored enterprises, certain financial institutions in the form of overnight investment products and Eurodollar deposits, bankers' acceptances, certificates of deposit, working capital acceptances or other deposits. Other permitted investments include highly rated obligations, such as commercial paper, certain obligations of foreign governments, municipal securities, asset-backed securities, mortgage-backed securities and certain corporate

bonds. In addition, we may invest in overnight or term repurchase agreements. Investments are denominated in U.S. dollars exclusively. All of these investments are subject to requirements and limitations set forth in our board investment policy.

INDUSTRY

Overview

Our rural electric cooperative members operate in the energy sector, which is one of 16 critical infrastructure sectors identified by the U.S. government because the services provided by each sector, all of which have an impact on other sectors, are deemed as essential in supporting and maintaining the overall functioning of the U.S. economy. Rural electric cooperatives are an integral part of the U.S. electric utility industry, a sub-sector of the energy sector. According to a report published in April 2023 by National Rural Electric Cooperative Association (“NRECA”), electric cooperatives serve as power providers for approximately 42 million people, including over 21.5 million businesses, homes, schools and farms across 48 states. Electric cooperatives provide power to approximately 56% of the nation’s land mass. Based on the latest annual data reported by the U.S. Energy Information Administration, a statistical and analytical agency within the U.S. Department of Energy, the electric utility industry had revenue of approximately \$422 billion in 2021.

CFC was established by electric utility cooperatives to serve as a supplemental financing source to RUS loan programs and to mitigate uncertainty related to government funding. CFC aggregates the combined strength of its rural electric member cooperatives to access the public capital markets and other funding sources. CFC works cooperatively with RUS; however, CFC is not a federal agency or a government-sponsored enterprise. CFC meets the financial needs of its rural electric members by:

- providing financing to RUS-eligible rural electric utility systems for infrastructure, including for those facilities that are not eligible for financing from RUS;
- providing bridge loans required by borrowers in anticipation of receiving RUS funding;
- providing financial products not otherwise available from RUS, including lines of credit, letters of credit, guarantees on tax-exempt financing, weather-related emergency lines of credit, unsecured loans and investment products such as commercial paper, select notes, medium-term notes and member capital securities; and
- meeting the financing needs of those rural electric systems that repay or prepay their RUS loans and replace the government loans with private capital.

Electric Member Operating Environment

In general, electric cooperatives have not been significantly impacted by the effects of retail deregulation. There were 19 states that had adopted programs that allow consumers to choose their supplier of electricity as of May 31, 2023. Depending on the state, the choices can range from being limited to commercial and industrial consumers to “retail choice” for all consumers. In most states, cooperatives have been exempted from or have been allowed to opt out of the regulations allowing for competition. In states offering retail competition, it is important to note that while consumers may be able to choose their energy supplier, the electric utility still receives compensation for the necessary service of delivering electricity to consumers through its utility transmission and distribution plant.

Facilitation of Rural Broadband Expansion by Electric Cooperatives

Many electric cooperatives are making investments in fiber to support core electric plant communications. Some of these electric cooperatives are leveraging these fiber assets to offer broadband services, either directly or through partnering with local telecommunication companies and others. Over 30 electric cooperatives were awarded approximately \$250 million in federal funding through the Connect America Fund Phase II auction (“CAF II”) process by the FCC that was held in 2018. The awarded funds are being distributed over a 10-year period. More than 190 electric cooperatives, many of which are already offering or building out projects, were awarded approximately \$1.6 billion through the FCC’s Rural Development Opportunity Fund (“RDOF”) in 2021. Those funds also will be distributed over a 10-year period. As federal and state governments increase funding opportunities for electric cooperatives in order to offer broadband services, we will continue to increase our credit support, which may include loans and/or letters of credit, to borrowers who participate in CAF II,

RDOF and other programs designed to increase broadband services in rural areas. CFC began tracking loans for broadband services in October 2017. We estimate, based on information available to us, loans outstanding to our members related to the construction and operation of broadband services increased to approximately \$2,355 million as of May 31, 2023, from approximately \$1,647 million as of May 31, 2022.

Regulatory Oversight of Electric Cooperatives

There are 11 states in which some or all electric cooperatives are subject to state regulatory oversight of their rates and tariffs by state utility commissions and do not have a right to opt out of regulation. Those states are Arizona, Arkansas, Hawaii, Kentucky, Louisiana, Maine, Maryland, New Mexico, Vermont, Virginia and West Virginia. Regulatory jurisdiction by state commissions generally includes rate and tariff regulation, the issuance of securities and the enforcement of service territory as provided for by state law.

The Federal Energy Regulatory Commission (“FERC”) has regulatory authority over three aspects of electric power, as provided for under Parts II and III of the Federal Power Act (“FPA”):

- the transmission of electric energy in interstate commerce;
- the sale of electric energy at wholesale in interstate commerce; and
- the approval and enforcement of reliability standards affecting all users, owners and operators of the bulk power system.

In addition, FERC regulates the issuance of securities by public utilities under the FPA in the event the applicable state commission does not.

Our electric distribution and power supply members are subject to regulation by various federal, regional, state and local authorities with respect to the environmental effects of their operations. At the federal level, the U.S. Environmental Protection Agency (“EPA”) from time to time proposes rulemakings that could force the electric utility industry to incur capital costs to comply with potential new regulations and possibly retire coal-fired generating capacity. Since there are only 11 states in which some or all electric cooperatives are subject to state regulatory oversight of their rates and tariffs, in most cases any associated costs of compliance can be passed on to cooperative consumers without additional regulatory approval.

On May 11, 2023, the EPA announced proposed new carbon pollution standards for coal and gas-fired power plants. The proposals would set limits for new gas-fired combustion turbines, existing coal, oil and gas-fired steam generating units and certain existing gas-fired combustion turbines. The comment period for the proposed carbon pollution standards ends on August 8, 2023. Once finalized, it is expected that certain states and environmental groups will challenge the standards in federal litigation.

LENDING COMPETITION

Overview

RUS is the largest lender to electric cooperatives, providing them with long-term secured loans. CFC provides financial products and services to its members, primarily in the form of long-term secured and short-term unsecured loans, to supplement RUS financing, to provide loans to members that have elected not to borrow from RUS and to bridge long-term financing provided by RUS. We also offer other financing options, such as credit support in the form of letters of credit and guarantees, loan syndications and loan participations. Our credit products are tailored to meet the specific needs of each borrower, and we often offer specific transaction structures that our competitors do not provide. CFC also offers certain risk-mitigation products and interest rate discounts on secured, long-term loans for its members that meet performance, volume, collateral and equity requirements.

Primary Lending Competitors

CFC’s primary competitor is CoBank, ACB, a federally chartered instrumentality of the U.S. that is a member of the Farm Credit System. CFC also competes with banks, other financial institutions and the capital markets to provide loans and other financial products to our members. As a result, we are competing with the customer service, pricing and funding options our

members are able to obtain from these sources. We attempt to minimize the effect of competition by offering a variety of loan options and value-added services and by leveraging the working relationships developed with the majority of our members over the past 54 years. In addition to leveraging these working relationships, we differentiate ourselves from other financial institutions by focusing on customer service and product flexibility. We also allocate substantially all net earnings to members (i) in the form of patronage capital, which reduces our members' effective cost of borrowing, and (ii) through the members' capital reserve. The value-added services that we provide include, but are not limited to, benchmarking tools, financial models, publications and various conferences, meetings, facilitation services and training workshops.

We are not able to specifically identify the amount of debt our members have outstanding to CoBank, ACB from either the annual financial and statistical reports our members file with us or from CoBank, ACB's public disclosure; however, we believe CoBank, ACB is the additional lender, along with CFC and RUS, with significant long-term debt outstanding to rural electric cooperatives.

Rural Electric Lending Market

Most of our rural electric borrowers are not-for-profit, private companies owned by the members they serve. As such, there is limited publicly available information to accurately determine the overall size of the rural electric lending market. We utilize the annual financial and statistical reports submitted to us by our members to estimate the overall size of the rural electric lending market. The substantial majority of our members have a fiscal year-end that corresponds with the calendar year-end. Therefore, the annual information we use to estimate the size of the rural electric market is typically based on the calendar year-end rather than CFC's fiscal year-end.

Based on financial data submitted to us by our electric utility members, we present the long-term debt outstanding to CFC by member class, RUS and other lenders in the electric cooperative industry as of December 31, 2022 and 2021 in the table below. The data presented as of December 31, 2022, were based on information reported by 809 distribution systems and 53 power supply systems. The data presented as of December 31, 2021, were based on information reported by 805 distribution systems and 54 power supply systems.

(Dollars in thousands)	December 31,			
	2022		2021 ⁽²⁾	
	Debt Outstanding	% of Total	Debt Outstanding	% of Total
Total long-term debt reported by members:⁽¹⁾				
Distribution	\$ 60,438,522		\$ 54,909,778	
Power supply	52,088,762		51,000,617	
Less: Long-term debt funded by RUS	(44,352,405)		(41,967,156)	
Members' non-RUS long-term debt	<u>\$ 68,174,879</u>		<u>\$ 63,943,239</u>	
Funding sources of members' long-term debt:				
Long-term debt funded by CFC by member class:				
Distribution	\$ 22,819,506	34 %	\$ 21,287,049	33 %
Power supply	4,892,268	7	4,791,465	8
Long-term debt funded by CFC	<u>27,711,774</u>	<u>41</u>	<u>26,078,514</u>	<u>41</u>
Long-term debt funded by other lenders	40,463,105	59	37,864,725	59
Members' non-RUS long-term debt	<u>\$ 68,174,879</u>	<u>100 %</u>	<u>\$ 63,943,239</u>	<u>100 %</u>

⁽¹⁾ Reported amounts are based on member-provided financial information, which may not have been subject to audit by an independent accounting firm.

⁽²⁾ Certain amounts as of December 31, 2021 have been updated from the prior period to reflect more current information based on our borrowers' audited financial statements.

While we believe our estimates of the overall size of the rural electric lending market serve as a useful tool in gauging the size of this lending sector, they should be viewed as estimates rather than precise measures as there are certain limitations in our estimation methodology, including, but not limited to, the following:

- Although certain underlying data included in the financial and statistical reports provided to us by members may have been audited by an independent accounting firm, our accumulation of the data from these reports has not been subject to a review for accuracy by an independent accounting firm.
- The data presented are not necessarily inclusive of all members because in some cases our receipt of annual member financial and statistical reports may be delayed and not received in a timely manner to incorporate into our market estimates.
- The financial and statistical reports submitted by members include information on indebtedness to RUS, but the reports do not include comprehensive data on indebtedness to other lenders and are not on a consolidated basis.

REGULATION

General

CFC, NCSC and RTFC are not subject to direct federal regulatory oversight or supervision with regard to lending. CFC, NCSC and RTFC are subject to state and local jurisdiction commercial lending and tax laws that pertain to business conducted in each state, including but not limited to lending laws, usury laws and laws governing mortgages. These state and local laws regulate the manner in which we make loans and conduct other types of transactions. The statutes, regulations and policies to which the companies are subject may change at any time. In addition, the interpretation and application by regulators of the laws and regulations to which we are subject may change from time to time. Certain of our contractual arrangements, such as those pertaining to funding obtained through the Guaranteed Underwriter Program, provide for the Federal Financing Bank and RUS to periodically review and assess CFC's compliance with program terms and conditions.

Derivatives Regulation

CFC engages in over-the-counter ("OTC") derivative transactions, primarily interest rate swaps, to hedge interest rate risk. As an end user of derivative financial instruments, CFC is subject to regulations that apply to derivatives generally. The Dodd-Frank Act ("DFA"), enacted July 2010, resulted in, among other things, comprehensive regulation of the OTC derivatives market. The DFA provides for an extensive framework for the regulation of OTC derivatives, including mandatory clearing, exchange trading and transaction reporting of certain OTC derivatives. Subsequent to the enactment of the DFA, the U.S. Commodity Futures Trading Commission ("CFTC") issued a final rule, "Clearing Exemption for Certain Swaps Entered into by Cooperatives," which created an exemption from mandatory clearing for cooperatives. The CFTC's final rule, "Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants," includes an exemption from margin requirements for uncleared swaps for cooperatives that are financial end users. CFC is an exempt cooperative end user of derivative financial instruments and does not participate in the derivatives markets for speculative, trading or investing purposes and does not make a market in derivatives.

HUMAN CAPITAL MANAGEMENT

CFC's success in providing industry expertise and responsive service to meet the needs of our members across the U.S. is dependent on the quality of service provided by our employees and their relationships with our members. We therefore strive to align our human capital management strategy with our member-focused mission and core values of service, integrity and excellence. Our objectives are (i) to attract, develop and retain a highly qualified workforce with diverse backgrounds and experience in multiple areas whose skills and strengths are consistent with CFC's mission, and (ii) to create an engaged, inclusive and collaborative work culture, which we believe are critical to deliver exceptional service to our members.

Governance of Human Capital

CFC's executive leadership team and board of directors work together to provide oversight on most human capital matters. The compensation committee of the board of directors meets quarterly to review updates to our compensation programs, including our salary structure, incentive plans and executive compensation. Our board is provided with periodic updates on

succession planning efforts, current human capital management risks and mitigation efforts in addition to any other matters that affect our ability to attract, develop and maintain the talent needed to execute on our corporate objectives.

Recruiting and Retaining Talent

As a financial services organization, our recruitment goal is to attract and retain a highly skilled workforce in a highly competitive talent market. We strive to provide both external candidates and internal employees who are seeking a different role with challenging and stimulating career opportunities ranging from entry-level to management and executive positions.

We use a variety of methods to attract highly talented and engaged professionals, including outreach to local universities, recruitment job boards, including sites focusing on diversity, a referral bonus program and targeted industry-related job posting sites. When appropriate, we engage with recruiting firms to ensure that we have surveyed a broad scope of active and passive candidates for certain critical positions. We strive to ensure that our employment value proposition presented to candidates accurately reflects the features of working for a mission-driven cooperative like CFC so that we can attract individuals who are highly engaged with our vision to be our members' most trusted financial resource.

Because much of our business operations involves significant member-facing interaction with a relatively stable base of long-standing member borrowers, we place a priority on the retention of high-performing employees who have extensive, in-depth experience serving the needs of our members. Our turnover rate for fiscal year 2023 was 9.5%, representing approximately half of the turnover rate from the prior fiscal year in which a higher number of staff retired due to favorable terms available under our group retirement plan as a result of the lower interest rate environment. Our average employee tenure is 8.1 years with more than a quarter of our workforce having 10 or more years of service with CFC. Given the challenges of the current talent market we feel that CFC's employee pool represents a balanced mix of long-term and new staff to serve our members. We welcomed 47 new hires this fiscal year and employed 276 staff members as of May 31, 2023, all of which are located in the U.S. The majority of our workforce are headquartered in Dulles, Virginia.

Employee Engagement and Development

As part of our efforts to promote an engaged, inclusive and collaborative workplace culture, we encourage employees to expand their capabilities and enhance their career potential through employer-funded onsite training, external training, tuition assistance and professional events. In fiscal year 2023, CFC employees completed more than 4,000 training hours through our internal corporate development programs and our support of employees' enrollment in external professional training opportunities. We seek to tailor our training programs to meet our required skill sets and employee interests, while also addressing key risks and compliance matters. In fiscal year 2023, CFC offered a variety of training opportunities on professional and technical topics such as effective presentations, business writing and data analysis to enhance employees' skills. We also require annual ethics and compliance training as well as quarterly cyber security training for all staff. Additionally, our staff created and presented a series of training sessions on each of our internal group's functions and strategic initiatives to promote understanding and engagement across teams. CFC also supports employee development through a company-sponsored Toastmasters chapter, guest speakers from cooperative partners and staff visits to local electric cooperatives to allow employees to learn first-hand how their efforts contribute to our members' success.

Compensation and Benefits Packages

Attracting, developing, rewarding and retaining high-level talent is a key component of our human capital objectives, so we seek to provide a competitive total rewards package consisting of base pay, an annual incentive opportunity, and benefits packages. CFC's compensation program includes a base salary range structure to provide flexibility in meeting labor market demands and the ability to differentiate pay based on experience and performance. The salary ranges are structured in zones aligned with median market pay for the positions in each zone. We continue to evaluate and make adjustments to our merit increase budget in order to retain and attract exceptional staff in a highly competitive talent market.

Our annual incentive plan is based on (i) attainment of our targeted corporate scorecard goals as established at the beginning of the fiscal year and (ii) individual performance ratings from our annual review process. Attainment of the annual scorecard goals requires the collective engagement and effort of employees across the company, which we believe incentivizes teamwork and fosters a collaborative working environment. The individual performance component enables the organization

to differentiate a portion of the incentive compensation, which demonstrates the value of a high-performance culture on behalf of our members.

The employee benefits components of our Total Rewards package include vacation and leave programs; health, dental, vision, life and disability insurance coverage; and flexible spending and health savings plans, most of which are funded in whole or in part by CFC. We make investments in the future financial security of our employees by offering retirement plans that consist of a 401(k) plan with a company match component and an employer-funded defined benefit retirement plan in which CFC makes an annual contribution in an amount that approximates 18% of each employee’s base salary, which we believe helps in our efforts to engage employees, retain high-performing employees and reduce turnover. We also offer programs and resources intended to promote work-life balance, assist in navigating life events and improve employee well-being, such as flexible work schedules, remote work options, an employee assistance program, legal insurance and identity theft coverage services. In fiscal year 2023 we added a paid parental leave program and several well-being and mental health-related resources to support our employees.

Open-Door Communications

CFC maintains a strong focus on our core value of integrity in pursuit of our mission. To promote open communication, we maintain an open-door policy and provide multiple avenues for employees to voice their concerns and offer suggestions. Employees are encouraged to report any issues to their manager, senior vice president, corporate compliance, human resources or our corporate ethics helpline. All new employees receive Code of Conduct & Business Ethics training, and all employees complete an annual Code of Conduct & Business Ethics training to foster a culture of integrity and accountability.

CORPORATE RESPONSIBILITY

For more than half a century, CFC has helped electric cooperatives provide essential services to rural America. Since their creation in the 1930s to bring electricity to rural homes, electric cooperatives have been essential to the economic vitality and quality of life in communities nationwide, including those in persistent poverty counties.

As a value-based, financial services cooperative, CFC is engaged in sustaining our environment across multiple fronts—from our Leadership in Energy and Environmental Design (“LEED”) Gold-certified building and 42-acre ecofriendly campus that serves as CFC’s headquarters, to the renewable energy projects we’ve helped finance for the electric cooperative network. CFC’s members are moving forward with renewable energy adoption, and we continue to support them by funding renewable energy initiatives that will help build out greater renewable infrastructure in the United States. CFC had outstanding loans to developers of renewable energy projects that benefit members totaling approximately \$268 million and \$193 million as of May 31, 2023 and 2022, respectively.

CFC has developed a Sustainability Bond Framework, which aligns with the Sustainability Bond Guidelines (“SBG”), as administered by the International Capital Markets Association (“ICMA”), under which we can issue sustainability bonds and use the proceeds to finance or refinance projects to enhance access to broadband services and renewable energy projects that provide positive environmental and social impact in rural America. CFC issued its first sustainability bond with an aggregate principal amount of \$400 million in October 2020, the first sustainability bond issued for the electric cooperative industry, and its second sustainability bond with an aggregate principal amount of \$400 million in August 2022. Today, CFC is proud to support electric cooperatives by providing approximately \$2,355 million in outstanding loans to support broadband expansion. These efforts have opened new opportunities in many rural communities by providing first ever access to affordable high-speed internet services.

True to our core values of service, integrity and excellence, CFC continues to help electric cooperatives support the communities that created them, whether it’s through contributions from the CFC Educational Fund or helping them access capital from the USDA’s Rural Economic Development Loan and Grant (“REDL&G”) program, which fosters economic development. Over the past 20 years, CFC has contributed an estimated \$222 million to the REDL&G program.

CFC and electric cooperatives operate under seven cooperative principles: open and voluntary membership; democratic member control; members’ economic participation; autonomy and independence; education, training and information;

cooperation among cooperatives; and concern for community. Through our “Commitment to Excellence” workshops, CFC has trained electric cooperative directors and executive staff on governance best practices, including how electric cooperative leaders should demonstrate principled leadership, financial stewardship, and effective governance and management risk oversight.

With these efforts, CFC empowers electric cooperatives to fulfill their historic mission of service and contribute to sustainability efforts.

AVAILABLE INFORMATION

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to these reports, are available for free at www.nrucfc.coop as soon as reasonably practicable after they are electronically filed with or furnished to the U.S. Securities and Exchange Commission (“SEC”). These reports also are available for free on the SEC’s website at www.sec.gov. Information posted on our website is not incorporated by reference into this Form 10-K.

Item 1A. Risk Factors

Our financial condition, results of operations and liquidity are subject to various risks and uncertainties, some of which are inherent in the financial services industry and others of which are more specific to our own business. The discussion below addresses the most significant risks, of which we are currently aware, that could have a material adverse impact on our business, financial condition, results of operations or liquidity. However, other risks and uncertainties, including those not currently known to us, could also negatively impact our business, financial condition, results of operations and liquidity. Therefore, the following should not be considered a complete discussion of all the risks and uncertainties we may face. For information on how we manage our key risks, see “Item 7. MD&A—Enterprise Risk Management.” You should consider the following risks together with all of the other information in this report.

RISK FACTORS

Credit Risks

We are subject to credit risk given that borrowers may not be able to meet their contractual obligations in accordance with agreed-upon terms, which could have a material adverse effect on our financial condition, results of operations and liquidity. Because we lend primarily to U.S. rural electric utility systems, we also are inherently subject to single-industry and single-obligor concentration risks.

As a lender, our primary credit risk arises from the extension of credit to borrowers. Our loan portfolio, which represents the largest component of assets on our balance sheet, accounts for the substantial majority of our credit risk exposure. Loans outstanding to electric utility organizations represented approximately 99% of our total loans outstanding as of May 31, 2023. We had 884 borrowers with loans outstanding as of May 31, 2023, and our 20 largest borrowers accounted for 20% of total loans outstanding as of May 31, 2023. The largest total exposure to a single borrower or controlled group represented 1% of total loans outstanding as of May 31, 2023. Texas historically has had the largest number of borrowers with loans outstanding and the largest loan concentration in any one state. Loans outstanding to Texas borrowers represented 17% of total loans outstanding as of May 31, 2023.

We face the risk that the principal of, or interest on, a loan will not be paid on a timely basis or at all or that the value of any underlying collateral securing a loan will be insufficient to cover our outstanding exposure. A deterioration in the financial condition of a borrower or underlying collateral could impair the ability of a borrower to repay a loan or our ability to recover unpaid amounts from the underlying collateral. We maintain an internal borrower risk rating system in which we assign a rating to each borrower and credit facility that are intended to reflect the ability of a borrower to repay its obligations and assess the probability of default and loss given default. The borrower risk rating system comprises both quantitative metrics and qualitative considerations. Each component is risk weighted in accordance with its importance. Unforeseen events and developments that affect specific borrowers or that occur in a region where we have a high concentration of credit risk may result in risk rating downgrades. Such an event may result in an increase in the allowance for credit losses; delinquent, nonperforming and criticized loans; net charge-offs; and our credit risk.

We establish an allowance for credit losses based on management's current estimate of credit losses that are expected to occur over the remaining life of the loans in our portfolio. Because the process for determining our allowance for credit losses requires informed judgments about the ability of borrowers to repay their loans, we identify the estimation of our allowance for credit losses as a critical accounting estimate. Our borrower risk ratings are a key input in establishing our allowance for credit losses. Therefore, the deterioration in the financial condition of a borrower may result in a significant increase in our allowance for credit losses and provision for credit losses and may have a material adverse impact on our results of operations, financial condition and liquidity. In addition, we might underestimate expected credit losses and have credit losses in excess of the established allowance for credit losses if we fail to timely identify a deterioration in a borrower's financial condition or due to other factors. These other factors include if the methodology and process we use in assigning borrower risk ratings and making judgments in extending credit to our borrowers does not accurately capture the level of our credit risk exposure or our historical loss experience proves to be not indicative of our expected future losses.

Adverse changes, developments or uncertainties in the rural electric utility industry could adversely impact the operations or financial performance of our member electric cooperatives, which, in turn, could have an adverse impact on our financial results.

Our focus as a member-owned finance cooperative is on lending to our rural member electric utility cooperatives, which is the primary source of our revenue. As a result of lending primarily to our members, we have a loan portfolio with single-industry concentration. Loans to rural electric utility cooperatives accounted for approximately 99% of our total loans outstanding as of May 31, 2023. While we historically have experienced limited defaults and very low credit losses in our electric utility loan portfolio, factors that may have a negative impact on the operations of our member rural electric cooperatives include but are not limited to, the price and availability of distributed energy resources, regulatory or compliance factors related to managing greenhouse gas emissions (including the potential for stranded assets), and extreme weather conditions, including weather conditions related to climate change. The factors listed above, individually or in combination, could result in declining sales or increased power supply and operating costs and could potentially cause a deterioration in the financial performance of our members and the value of the collateral securing their loans. This could impair their ability to repay us in accordance with the terms of their loans. In such case, it may lead to risk rating downgrades, which may result in an increase in our allowance for credit losses and a decrease in our net income.

The threat of weather-related events or shifts in climate patterns resulting from climate change, including, but not limited to, increases in storm intensity, number of intense storms and temperature extremes in areas in which our member rural electric cooperatives operate, could result in increased power supply and operating costs, adversely impacting our members' results of operations, liquidity and ability to make payments to us. While we believe our members would largely be reimbursed by Federal Emergency Management Agency ("FEMA") relief programs for storm-related damages, such programs may not be implemented in their current forms or payments may not be received on a timely basis. For increased power costs, although we believe our members have the ability to pass through increased costs to their members, in some cases it may be difficult to pass through the entire costs on a timely basis if they are significant. To the extent CFC makes bridge loans to members as they wait for FEMA payments, changes to FEMA programs or delays in payments from FEMA could adversely impact the quality of our loan portfolio and our financial condition. Additionally, our member rural electric cooperatives are subject to evolving local, state and federal laws, regulations and expectations regarding the environment. These requirements and expectations may increase the time and costs of efforts to monitor and comply with such obligations and expose them to liability. The impacts of climate change present notable risks, including damage to the assets of our members, which could adversely impact the quality of our loan portfolio and our financial condition.

Advances in technology may change the way electricity is generated and transmitted or the way broadband is deployed, which could adversely affect the business operations of our members and negatively impact the credit quality of our loan portfolio and financial results.

Advances in technology could reduce demand for power supply systems and distribution services. The development of alternative technologies that produce electricity, including solar cells, wind power and microturbines, has expanded and could ultimately provide affordable alternative sources of electricity and permit end users to adopt distributed generation systems that would allow them to generate electricity for their own use. As these and other technologies, including energy conservation measures, are created, developed and improved, the quantity and frequency of electricity usage by rural customers could decline. As with any internet service provider, rural electric cooperatives may face the risk of being outpaced by technological advancements. While fiber broadband is currently a leading technology, the rise of 5G satellite internet, and other emerging technology, could potentially disrupt the broadband market. Advances in technology and

conservation that cause our electric system members' power supply, transmission and/or distribution facilities to become obsolete prior to the maturity of loans secured by these assets could have an adverse impact on the ability of our members to repay such loans, which could result in an increase in nonperforming or restructured loans. These conditions could negatively impact the credit quality of our loan portfolio and financial results.

We may obtain entities or other assets through foreclosure, which would subject us to the same performance and financial risks as any other owner or operator of similar businesses or assets.

As a financial institution, from time to time we may obtain entities and assets of borrowers in default through foreclosure proceedings. If we become the owner and operator of entities or assets obtained through foreclosure, we are subject to the same performance and financial risks as any other owner or operator of similar assets or entities. In particular, the value of the foreclosed assets or entities may deteriorate and have a negative impact on our results of operations. We assess foreclosed assets, if any, for impairment periodically as required under generally accepted accounting principles in the U.S. ("U.S. GAAP.") Impairment charges, if required, represent a reduction to earnings in the period of the charge. There may be substantial judgment used in the determination of whether such assets are impaired and in the calculation of the amount of the impairment. In addition, when foreclosed assets are sold to a third party, the sale price we receive may be below the amount previously recorded in our financial statements, which will result in a loss being recorded in the period of the sale.

The nonperformance of our derivative counterparties could impair our financial results.

We use interest rate swaps to manage interest rate risk. There is a risk that the counterparties to these agreements will not perform as agreed, which could adversely affect our results of operations. The nonperformance of a counterparty on an agreement would result in the derivative no longer being an effective risk-management tool, which could negatively affect our overall interest rate risk position. In addition, if a counterparty fails to perform on a derivative obligation, we could incur a financial loss to replace the derivative with another counterparty and/or a loss through the failure of the counterparty to pay us amounts owed. After taking into consideration master netting agreements for our interest rate swaps, we were in a net receivable position of \$349 million and a net payable position of \$3 million as of May 31, 2023.

A decline in our credit rating could trigger payments under our derivative agreements, which could impair our financial results.

We have certain interest rate swaps that contain credit risk-related contingent features referred to as rating triggers. Under certain rating triggers, if the credit rating for either counterparty falls to the level specified in the agreement, the other counterparty may, but is not obligated to, terminate the agreement. If either counterparty terminates the agreement, a net payment may be due from one counterparty to the other based on the prevailing fair value, excluding credit risk, of the underlying derivative instrument. In the event that we are required to make a payment as a result of a rating trigger, it could have a material adverse impact on our financial results. These rating triggers are based on our senior unsecured credit ratings by Moody's Investors Service ("Moody's") and S&P Global Inc. ("S&P"). Based on our interest rate swap agreements subject to rating triggers, if our senior unsecured ratings fell below Baa2 by Moody's or below BBB by S&P and the agreements were consequently terminated as of May 31, 2023, all agreements for which we owe amounts when netted for each counterparty pursuant to a master netting agreement were in a net payable position of approximately \$3 million as of that date.

Liquidity Risks

If we are unable to access the capital markets or other external sources for funding, our liquidity position may be negatively affected and we may not have sufficient funds to meet all of our financial obligations as they become due.

We depend on access to the capital markets and other sources of financing, such as repurchase agreements, bank revolving credit agreements, investments from our members, private debt issuances through Farmer Mac and through the Guaranteed Underwriter Program, to fund new loan advances, refinance our long- and short-term debt and, if necessary, to fulfill our obligations under our guarantee and repurchase agreements. Prolonged market disruptions, downgrades to our long-term and/or short-term debt ratings, adverse changes in our business or performance, downturns in the electric industry and other events over which we have no control may deny or limit our access to the capital markets and/or subject us to higher costs for such funding. Our access to other sources of funding also could be limited by the same factors, by adverse changes in the business or performance of our members, by the banks committed to our revolving credit agreements or Farmer Mac, or by changes in federal law or the Guaranteed Underwriter Program. Our funding needs are determined primarily by scheduled

short- and long-term debt maturities and the amount of our loan advances to our borrowers relative to the scheduled payment amortization of loans previously made by us. If we are unable to timely issue debt in the capital markets or obtain funding from other sources, we may not have the funds to meet all of our obligations as they become due.

A reduction in the credit ratings for our debt could adversely affect our liquidity and/or cost of debt.

Our credit ratings are important to maintaining our liquidity position. We currently contract with three nationally recognized statistical rating organizations to receive ratings for our secured and unsecured debt and our commercial paper. In order to access the commercial paper markets at current levels, we believe that we need to maintain our short-term ratings at the current level from Moody's, S&P and Fitch. Changes in rating agencies' rating methodology, actions by governmental entities or others, deterioration in the credit quality of our loan portfolios, increased leverage and other factors could adversely affect the credit ratings on our debt. A reduction in our credit ratings could adversely affect our liquidity, increase our borrowing costs or limit our access to the capital markets and the sources of financing available to us. A significant increase in our cost of borrowings and interest expense could impact our competitive position within the industry.

Our ability to maintain compliance with the covenants related to our revolving credit agreements, collateral trust bond and medium-term note indentures and debt agreements could affect our ability to retire patronage capital, result in the acceleration of the repayment of certain debt obligations, adversely impact our credit ratings and hinder our ability to obtain financing.

We must maintain compliance with all covenants and conditions related to our revolving credit agreements and debt indentures. We are required to maintain a minimum average adjusted times interest earned ratio ("adjusted TIER") for the six most recent fiscal quarters of 1.025 and an adjusted leverage ratio of no more than 10-to-1. In addition, we must maintain loans pledged as collateral for various debt issuances at or below 150% of the related secured debt outstanding as a condition to borrowing under our revolving credit agreements. If we were unable to borrow under the revolving credit agreements, our short-term debt ratings would likely decline, and our ability to issue commercial paper could become significantly impaired. Our revolving credit agreements also require that we earn a minimum annual adjusted TIER of 1.05 in order to retire patronage capital to members. See "Item 7. MD&A—Non-GAAP Financial Measures" for additional information on our non-GAAP financial measures and a reconciliation to the most comparable U.S. GAAP financial measures.

Pursuant to our collateral trust bond indentures, we are required to maintain eligible pledged collateral at least equal to 100% of the principal amount of the bonds issued under the indenture. Pursuant to one of our collateral trust bond indentures and our medium-term note indenture, we are required to limit senior indebtedness to 20 times the sum of our members' equity, subordinated deferrable debt and members' subordinated certificates. If we were in default under our collateral trust bond or medium-term note indentures, the existing holders of these securities have the right to accelerate the repayment of the full amount of the outstanding debt of the security before the stated maturity of such debt. That acceleration of debt repayments poses a significant liquidity risk, as we might not have enough cash or committed credit available to repay the debt. In addition, if we are not in compliance with the collateral trust bond and medium-term note covenants, we would be unable to issue new debt securities under such indentures. If we were unable to issue new collateral trust bonds and medium-term notes, our ability to fund new loan advances and refinance maturing debt would be impaired.

We are required to pledge eligible distribution system or power supply system loans as collateral equal to at least 100% of the outstanding balance of debt issued under a revolving note purchase agreement with Farmer Mac. We also are required to pledge distribution or power supply loans as collateral equal to at least 100% of the outstanding balance of debt under the Guaranteed Underwriter Program. Collateral coverage less than 100% for either of these debt programs constitutes an event of default, which if not cured within 30 days, could result in creditors accelerating the repayment of the outstanding debt principal before the stated maturity. An acceleration of the repayment of debt could pose a liquidity risk if we had insufficient cash or committed credit available to repay the debt. In addition, we would be unable to issue new debt securities under the applicable debt agreement, which could impair our ability to fund new loan advances and refinance maturing debt.

Market Risks

Changes in the level and direction of interest rates or our ability to successfully manage interest rate risk could adversely affect our financial results and condition.

Our primary strategies for managing interest rate risk include the use of derivatives in order to manage the timing of cash flows between interest-earning assets and interest-bearing liabilities. We face the risk that changes in interest rates could reduce our net interest income and our earnings. Fluctuations in interest rates, including changes in the relationship between short-term rates and long-term rates, may affect the pricing of loans to borrowers and our cost of funds, which could adversely affect the difference between the interest that we earn on assets and the interest we pay on liabilities used to fund assets. Such changes may also result in increased costs to hedge existing interest rate risk, which may have an adverse impact on the net interest income, earnings and cash flows. See “Item 7. MD&A—Market Risk” for additional information.

The Secured Overnight Financing Rate (“SOFR”) is a relatively new reference rate with limited historical performance and composition and characteristics that differ from the London Interbank Offered Rate (“LIBOR”). We may be adversely affected by developments in the SOFR market or changes in the methods by which SOFR is determined.

In March 2021, the United Kingdom’s Financing Conduct Authority and the Intercontinental Exchange Benchmark Administration, the administrator for LIBOR, concurrently announced that certain settings of LIBOR would no longer be published on a representative basis after December 31, 2021, and the most commonly used U.S. dollar LIBOR settings would no longer be published on a representative basis after June 30, 2023. In the fiscal quarter ended November 30, 2021, we began entering into transactions that reference SOFR, and as of June 30, 2023, substantially all of our contracts and financial instruments that previously referenced LIBOR have been transitioned to SOFR. The publication of SOFR began in April 2018 and has a very limited history. Since its publication began in 2018, daily changes in SOFR have, on occasion, been more volatile than daily changes in comparable benchmark or other market rates. Accordingly, the future performance of SOFR, including how changes in SOFR rates may differ from other rates during different economic conditions, cannot be predicted based on the limited historical performance. Further, we cannot predict how SOFR will perform in comparison to LIBOR in changing market conditions, what the effect of such rate’s implementation may be on the markets for floating-rate financial instruments or whether such rates will be vulnerable to manipulation. While we have updated our risk and pricing models, valuation tools and information technology systems to account for SOFR, we cannot predict whether further changes will be required in the future.

Operations and Business Risks

Damage to our reputation could harm our business, including our ability to attract highly skilled employees and our competitive position.

Our ability to attract business from our members and investors as well as our ability to attract highly skilled employees is impacted by our reputation. Harm to our reputation can be attributed to various sources including, but not limited to, actual or perceived activities such as fraud, misconduct or unethical behavior of our officers, directors, employees, contractors and other representatives. Further, reputation damage may result from human error or systems failures viewed as having harmed our customers without involving misconduct, including service disruptions or negative perceptions regarding our ability to maintain the security of our technology systems and protect member data. Negative publicity concerning actual or alleged conduct in activities such as lending practices, data security, corporate governance and failure to deliver minimum or required standards of service or quality may result in negative public opinion and may damage our reputation, which could result in the loss of business.

Breaches of our information technology systems, or those managed by third parties, may damage relationships with our members or subject us to reputational, financial, legal or operational consequences.

Cyber-related attacks pose a risk to the security of our members’ strategic business information and the confidentiality and integrity of our data, which include strategic and proprietary information. This risk continues to increase and attack methods continue to evolve in sophistication, velocity, and frequency. Security breaches may occur from a variety of sources, such as foreign governments, hacktivists, or other well-financed entities, and may originate from less regulated and remote areas of the world. Employee errors, malfeasance, technology failures and other irregularities may also contribute to these events.. Any such breach or unauthorized access can result in a loss of this information, a loss of integrity of this information, a delay or inability to provide service of affected products to our members, damage to our reputation, including a loss of

confidence in the security of our products and services, and significant legal and financial exposure. Because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently, we may be unable to anticipate these techniques or implement adequate preventative measures. As a result, cyber-related attacks may remain undetected for an extended period and may be costly to remediate.

Our business depends on the reliable and secure operation of computer systems, network infrastructure and other information technology managed by third parties including, but not limited to, our service providers for external storage and processing of our information on cloud-based systems; our consulting and advisory firms and contractors that have access to our confidential and proprietary data; and administrators for our employee payroll and benefits management. We have limited control and visibility over third-party systems that we rely on for our business. The occurrence of a cyber-related attack, breach, unauthorized access or other cybersecurity event could result in damage to our third parties' operations. The failure of third parties to provide services agreed upon through service-level agreements, whether as a result of the occurrence of a cyber-related attack or other event, could result in the loss of access to our data, the loss of integrity of our data, disruptions to our corporate functions, loss of business opportunities or reputational damage, or otherwise adversely impact our financial results and cause significant costs and liabilities.

While CFC maintains insurance coverage that, subject to policy terms and conditions, covers certain aspects of cyber risks, including business interruptions caused by cyber-related attacks on information technology systems managed by third parties, such insurance coverage may be insufficient to cover all losses. Our failure to comply with applicable laws and regulations regarding data security and privacy could result in fines, sanctions and litigation. Additionally, new regulation in the areas of data security and privacy may increase our costs and our members' costs.

Our elected directors also serve as officers or directors of certain of our individual member cooperatives, which may result in a potential conflict of interest with respect to loans, guarantees and extensions of credit that we may make to or on behalf of such member cooperatives.

In accordance with our charter documents and the purpose for which we were formed, we lend only to our members and associates. CFC's directors are elected or appointed from our membership, with 10 director positions filled by directors of members, 10 director positions filled by general managers or chief executive officers of members, two positions appointed by NRECA and one at-large position that must, among other things, be a director, financial officer, general manager or chief executive of one of our members. CFC currently has loans outstanding to members that are affiliated with CFC directors and may periodically extend new loans to such members. The relationship of CFC's directors to our members may give rise to conflicts of interests from time to time. See "Item 13. Certain Relationships and Related Transactions, and Director Independence—Review and Approval of Transactions with Related Persons" for a description of our policies with regard to approval of loans to members affiliated with CFC directors.

Natural or man-made disasters, including widespread health emergencies, or other external events beyond our control such as the invasion of Ukraine by Russia, could disrupt our business and adversely affect our results of operations and financial condition.

Our operations may be subject to disruption due to the occurrence of natural disasters, acts of terrorism or war, such as the invasion of Ukraine by Russia, public health emergencies, such as a reemergence of the COVID-19 pandemic, or other unexpected or disastrous conditions, events or emergencies beyond our control, some of which may be intensified by the effects of a government response to the event, or climate change.

Labor shortages and supply chain complications exacerbated by, among other things, the invasion of Ukraine by Russia and subsequent sanctions and export controls against Russia, has contributed to rising inflationary pressures. General inflation in the United States has risen to levels not experienced in recent decades. Rising energy prices, interest rates and wages, among other things, may increase our operating costs as well as both the operating and borrowing costs of our members and disrupt our business.

Although we have implemented a business continuity management program that we enhance on an ongoing basis, there can be no assurance that the program will adequately mitigate the risks of business disruptions. Further, events such as natural disasters and public health emergencies may divert our attention away from normal operations and limit necessary resources. We generally must resume operations promptly following any interruption. If we were to suffer a disruption or interruption and were not able to resume normal operations within a period consistent with industry standards, our business,

financial condition or results of operations could be adversely affected in a material manner. In addition, depending on the nature and duration of the disruption or interruption, we might become vulnerable to fraud, additional expense or other losses, or to a loss of business.

Competition from other lenders could adversely impact our financial results.

We compete with other lenders for the portion of the rural utility loan demand for which RUS will not lend and for loans to members that have elected not to borrow from RUS. The primary competition for the non-RUS loan volume is from CoBank, ACB, a federally chartered instrumentality of the U.S. that is a member of the Farm Credit System. As a government-sponsored enterprise, CoBank, ACB has the benefit of an implied government guarantee with respect to its funding. Competition may limit our ability to raise rates to adequately cover increases in costs, which could have an adverse impact on our results of operations, and increasing interest rates to cover costs could cause a reduction in new lending business.

The failure to attract, retain or motivate highly skilled and qualified employees could impair our ability to successfully execute our strategic plan and otherwise adversely affect our business.

We rely on our employees' depth of knowledge of CFC and its related industries to run our business operations successfully. Because much of our business operations involve significant member-facing interaction with a relatively stable base of long-standing member borrowers, we place a priority on the retention of high-performing employees with extensive experience in the rural utility industry. Our ability to implement our strategic plan and our future success depends on our ability to attract, retain and motivate highly skilled and qualified employees. The failure to attract or retain, including due to retirement, or replace a sufficient number of appropriately skilled and key employees could place us at a significant competitive disadvantage and prevent us from successfully implementing our strategy. Further, the marketplace for skilled employees is becoming more competitive, which means the cost of hiring, incentivizing and retaining skilled employees may continue to increase. The failure to attract, retain or motivate skilled employees, along with the increased costs, could impair our ability to achieve our performance targets and otherwise have a material adverse effect on our business, financial condition and results of operations.

Regulatory and Compliance Risks

Loss of our tax-exempt status could adversely affect our earnings.

CFC has been recognized by the Internal Revenue Service as an organization for which income is exempt from federal taxation under Section 501(c)(4) of the Internal Revenue Code (other than any net income from an unrelated trade or business). In order to maintain CFC's tax-exempt status, it must continue to operate exclusively for the promotion of social welfare by operating on a cooperative basis for the benefit of its members by providing them cost-based financial products and services consistent with sound financial management, and no part of CFC's net earnings may inure to the benefit of any private shareholder or individual other than the allocation or return of net earnings or capital to its members in accordance with CFC's bylaws and incorporating statute in effect in 1996.

If CFC were to lose its status as a 501(c)(4) organization, it would become a taxable cooperative and would be required to pay income tax based on its taxable income. If this event occurred, we would evaluate all options available to modify CFC's structure and/or operations to minimize any potential tax liability.

As a tax-exempt cooperative and nonbank financial institution, our lending activities are not subject to the regulations and oversight of U.S. financial regulators such as the Federal Reserve, the Federal Deposit Insurance Corporation or the Office of Comptroller of Currency. Because we are not under the purview of such regulation, we could engage in activities that could expose us to greater credit, market and liquidity risk, reduce our safety and soundness and adversely affect our financial results.

Financial institutions subject to regulations, oversight and monitoring by U.S. financial regulators are required to maintain specified levels of capital and may be restricted from engaging in certain lending-related and other activities that could adversely affect the safety and soundness of the financial institution or are considered conflicts of interest. As a tax-exempt, nonbank financial institution, we are not subject to the same oversight and supervision. There is no federal financial regulator that monitors compliance with our risk policies and practices or that identifies and addresses potential deficiencies

that could adversely affect our financial results. Without regulatory oversight and monitoring, there is a greater potential for us to engage in activities that could pose a risk to our safety and soundness relative to regulated financial institutions.

Changes in accounting standards or assumptions in applying accounting policies could materially impact our financial statements.

Our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Some of these policies require the use of estimates and assumptions that may affect the reported carrying amount of our assets or liabilities and our results of operations. We consider the accounting policies that require management to make difficult, subjective and complex judgments about matters that are inherently uncertain as our most critical accounting estimates. The use of reasonably different estimates and assumptions could have a material impact on our financial statements or if the assumptions, estimates or judgments were incorrectly made, we could be required to correct and restate prior-period financial statements. In addition, from time to time, the Financial Accounting Standards Board (“FASB”) and the SEC change the accounting and reporting standards that govern the preparation of our financial statements. These changes can be hard to predict and can materially impact how CFC records and reports its financial condition and results of operations. We could be required to apply a new or revised standard retroactively or apply an existing standard differently, on a retroactive basis, in each case potentially resulting in restating prior-period financial statements. For information on what we consider to be our most critical accounting estimates and recent accounting changes, see “Item 7. MD&A—Critical Accounting Estimates” and “Note 1—Summary of Significant Accounting Policies—New Accounting Standards” to our consolidated financial statements.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

CFC owns an office building, with approximately 141,000 gross square footage, in Loudoun County, Virginia, that serves as its headquarters.

Item 3. Legal Proceedings

From time to time, CFC is subject to certain legal proceedings and claims in the ordinary course of business, including litigation with borrowers related to enforcement or collection actions. Management presently believes that the ultimate outcome of these proceedings, individually and in the aggregate, will not materially harm our financial position, liquidity or results of operations. CFC establishes reserves for specific legal matters when it determines that the likelihood of an unfavorable outcome is probable and the loss is reasonably estimable. Accordingly, no reserve has been recorded with respect to any legal proceedings at this time.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Not applicable.

Item 6. Reserved

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”)

INTRODUCTION

Our financial statements include the consolidated accounts of CFC, NCSC and RTFC. Our principal operations are currently organized for management reporting purposes into three business segments, which are based on the accounts of each of the legal entities included in our consolidated financial statements: CFC, NCSC and RTFC. We provide information on the business structure, mission, principal purpose and core business activities of each of these entities under “Item 1. Business.” Unless stated otherwise, references to “we,” “our” or “us” relate to CFC and its consolidated entities.

The following MD&A is intended to enhance the understanding of our consolidated financial statements by providing material information that we believe is relevant in evaluating our results of operations, financial condition and liquidity and the potential impact of material known events or uncertainties that, based on management’s assessment, are reasonably likely to cause the financial information included in this Report not to be necessarily indicative of our future financial performance. Management monitors a variety of key indicators and metrics to evaluate our business performance. We discuss these key measures and factors influencing changes from period to period. Our MD&A is provided as a supplement to, and should be read in conjunction with, our audited consolidated financial statements and related notes for the fiscal year ended May 31, 2023 (“fiscal year 2023”) included in this Report and additional information contained elsewhere in this Report, including the risk factors discussed under “Item 1A. Risk Factors.”

SUMMARY OF SELECTED FINANCIAL DATA

In addition to financial measures determined in conformity with generally accepted accounting principles in the United States (“U.S. GAAP”), management also evaluates performance based on certain non-GAAP financial measures and metrics, which we refer to as “adjusted” measures. Our key non-GAAP financial measures are adjusted net income, adjusted net interest income, adjusted interest expense, adjusted net interest yield, adjusted times interest earned ratio (“TIER”) and adjusted debt-to-equity ratio. The most comparable U.S. GAAP financial measures are net income, net interest income, interest expense, net interest yield, TIER and debt-to-equity ratio, respectively. The primary adjustments we make to calculate these non-GAAP financial measures consist of (i) adjusting interest expense and net interest income to include the impact of net periodic derivative cash settlements income (expense) amounts; (ii) adjusting net income, total liabilities and total equity to exclude the non-cash impact of the accounting for derivative financial instruments; (iii) adjusting total liabilities to exclude the amount that funds CFC member loans guaranteed by RUS, subordinated deferrable debt and members’ subordinated certificates; and (iv) adjusting total equity to include subordinated deferrable debt and members’ subordinated certificates and exclude cumulative derivative forward value gains and losses and accumulated other comprehensive income (“AOCI”).

We believe our non-GAAP financial measures, which should not be considered in isolation or as a substitute for measures determined in conformity with U.S. GAAP, provide meaningful information and are useful to investors because management evaluates performance based on these metrics for purposes of (i) establishing short- and long-term performance goals; (ii) budgeting and forecasting; (iii) comparing period-to-period operating results, analyzing changes in results and identifying potential trends; and (iv) making compensation decisions. In addition, certain of the financial covenants in our committed bank revolving line of credit agreements and debt indentures are based on non-GAAP financial measures, as the forward fair value gains and losses related to our interest rate swaps that are excluded from our non-GAAP financial measures do not affect our cash flows, liquidity or ability to service our debt. Our non-GAAP financial measures may not be comparable to similarly titled measures reported by other companies due to differences in the way that these measures are calculated.

We provide a reconciliation of our non-GAAP financial measures to the most directly comparable U.S. GAAP financial measures in the section “Non-GAAP Financial Measures.”

Table 1 provides a summary of selected financial data and key metrics used by management in evaluating performance for each fiscal year in the five-year period ended May 31, 2023.

Table 1: Summary of Selected Financial Data⁽¹⁾

(Dollars in thousands)	Year Ended May 31,					Change	
	2023	2022	2021	2020	2019	2023 vs. 2022	2022 vs. 2021
Statements of operations							
Net interest income:							
Interest income	\$ 1,351,729	\$ 1,141,243	\$ 1,116,601	\$ 1,151,286	\$ 1,135,670	18 %	2 %
Interest expense	(1,036,508)	(705,534)	(702,063)	(821,089)	(836,209)	47	—
Net interest income	315,221	435,709	414,538	330,197	299,461	(28)	5
Fee and other income	18,134	17,193	18,929	22,961	15,355	5	(9)
Total revenue	333,355	452,902	433,467	353,158	314,816	(26)	4
Benefit (provision) for credit losses	(603)	17,972	(28,507)	(35,590)	1,266	**	**
Derivative gains (losses):							
Derivative cash settlements interest income (expense) ⁽²⁾	33,577	(101,385)	(115,645)	(55,873)	(43,611)	**	(12)
Derivative forward value gains (losses) ⁽³⁾	252,267	557,867	621,946	(734,278)	(319,730)	(55)	(10)
Derivative gains (losses)	285,844	456,482	506,301	(790,151)	(363,341)	(37)	(10)
Other non-interest income (loss)	(4,974)	(30,179)	1,495	9,431	(1,799)	(84)	**
Operating expenses ⁽⁴⁾	(109,631)	(95,186)	(94,705)	(101,167)	(93,166)	15	1
Other non-interest expense	(1,604)	(2,306)	(3,075)	(26,271)	(8,775)	(30)	(25)
Income (loss) before income taxes	502,387	799,685	814,976	(590,590)	(150,999)	(37)	(2)
Income tax benefit (provision)	(800)	(1,148)	(998)	1,160	(211)	(30)	15
Net income (loss)	\$ 501,587	\$ 798,537	\$ 813,978	\$ (589,430)	\$ (151,210)	(37)	(2)
Adjusted statements of operations measures							
Interest income	\$ 1,351,729	\$ 1,141,243	\$ 1,116,601	\$ 1,151,286	\$ 1,135,670	18 %	2 %
Interest expense	(1,036,508)	(705,534)	(702,063)	(821,089)	(836,209)	47	—
Include: Derivative cash settlements interest income (expense) ⁽²⁾	33,577	(101,385)	(115,645)	(55,873)	(43,611)	**	(12)
Adjusted interest expense ⁽⁵⁾	(1,002,931)	(806,919)	(817,708)	(876,962)	(879,820)	24	(1)
Adjusted net interest income ⁽⁵⁾	\$ 348,798	\$ 334,324	\$ 298,893	\$ 274,324	\$ 255,850	4	12
Net income (loss)	\$ 501,587	\$ 798,537	\$ 813,978	\$ (589,430)	\$ (151,210)	(37)	(2)
Exclude: Derivative forward value gains (losses) ⁽³⁾	252,267	557,867	621,946	(734,278)	(319,730)	(55)	(10)
Adjusted net income ⁽⁵⁾	\$ 249,320	\$ 240,670	\$ 192,032	\$ 144,848	\$ 168,520	4	25
Profitability ratios							
Times interest earned ratio (TIER) ⁽⁶⁾	1.48	2.13	2.16	0.28	0.82	(31) %	(1) %
Adjusted TIER ⁽⁵⁾	1.25	1.30	1.23	1.17	1.19	(4)	6
Net interest yield ⁽⁷⁾	0.98 %	1.46 %	1.47 %	1.21 %	1.14 %	(48) bps	(1) bps
Adjusted net interest yield ⁽⁵⁾⁽⁸⁾	1.08	1.12	1.06	1.00	0.97	(4)	6
Credit quality ratios							
Net charge-off rate ⁽⁹⁾	0.05 %	—	—	—	—	5 bps	—

[Table of Contents](#)

(Dollars in thousands)	Year Ended May 31,					Change	
	2023	2022	2021	2020	2019	2023 vs. 2022	2022 vs. 2021
Balance sheets							
Assets:							
Cash, cash equivalents and restricted cash	\$ 207,237	\$ 161,114	\$ 303,361	\$ 680,019	\$ 186,204	29 %	(47) %
Investment securities	510,369	599,904	611,277	370,135	652,977	(15)	(2)
Loans to members ⁽¹⁰⁾	32,532,086	30,063,386	28,426,961	26,702,380	25,916,904	8	6
Allowance for credit losses ⁽¹¹⁾	(53,094)	(67,560)	(85,532)	(53,125)	(17,535)	(21)	(21)
Loans to members, net	32,478,992	29,995,826	28,341,429	26,649,255	25,899,369	8	6
Total assets	34,012,060	31,251,382	29,638,363	28,157,605	27,124,372	9	5
Liabilities and equity:							
Short-term borrowings	4,546,275	4,981,167	4,582,096	3,961,985	3,607,726	(9)	9
Long-term debt	23,946,548	21,545,440	20,603,123	19,712,024	19,210,793	11	5
Subordinated deferrable debt	1,283,436	986,518	986,315	986,119	986,020	30	—
Members' subordinated certificates	1,223,126	1,234,161	1,254,660	1,339,618	1,357,129	(1)	(2)
Total debt outstanding	30,999,385	28,747,286	27,426,194	25,999,746	25,161,668	8	5
Total liabilities	31,422,811	29,109,413	28,238,484	27,508,783	25,820,490	8	3
Total equity	2,589,249	2,141,969	1,399,879	648,822	1,303,882	21	53
Adjusted balance sheets measures							
Adjusted total liabilities ⁽⁵⁾	\$28,678,302	\$26,629,324	\$25,273,384	\$23,777,823	\$22,931,626	8 %	5 %
Adjusted total equity ⁽⁵⁾	4,751,712	4,270,476	4,106,172	4,061,411	3,999,164	11	4
Members' equity ⁽⁵⁾	2,211,092	2,019,952	1,836,135	1,707,770	1,626,847	9	10
Debt ratios							
Debt-to-equity ratio ⁽¹²⁾	12.14	13.59	20.17	42.40	19.80	(11) %	(33) %
Adjusted debt-to-equity ratio ⁽⁵⁾	6.04	6.24	6.15	5.85	5.73	(3)	1
Liquidity coverage ratio ⁽¹³⁾	1.03	0.99	0.99	1.17	1.32	4	—
Credit quality ratios							
Nonperforming loans ratio ⁽¹⁴⁾	0.27 %	0.76 %	0.84 %	0.63 %	— %	(49) bps	(8) bps
Criticized loans ratio ⁽¹⁵⁾	0.99	1.65	3.12	1.39	0.78	(66)	(147)
Allowance coverage ratio ⁽¹⁶⁾	0.16	0.22	0.30	0.20	0.07	(6)	(8)

**Calculation of percentage change is not meaningful.

(1) Certain reclassifications may have been made for prior periods to conform to the current-period presentation.

(2) Consists of net periodic contractual interest amounts on our interest rate swaps, which we refer to as derivatives cash settlements interest income (expense).

(3) Consists of derivative forward value gains (losses), which represent changes in fair value during the period, excluding net periodic contractual interest settlement amounts, attributable to derivatives not designated for hedge accounting.

(4) Consists of the total non-interest expense components (i) salaries and employee benefits and (ii) other general and administrative expenses, each of which is presented separately on the consolidated statements of operations.

(5) See "Non-GAAP Financial Measures" for a description of each of our non-GAAP financial measures and additional detail on the reconciliation of the non-GAAP financial measures presented in this Report to the most comparable U.S. GAAP financial measures.

(6) Calculated based on net income (loss) plus interest expense for the period divided by interest expense for the period.

(7) Calculated based on net interest income for the period divided by average interest-earning assets for the period.

(8) Calculated based on adjusted net interest income for the period divided by average interest-earning assets for the period.

(9) Calculated based on net charge-offs (recoveries) for the period divided by average total loans outstanding for the period.

(10) Consists of the unpaid principal balance of member loans plus unamortized deferred loan origination costs of \$13 million as of May 31, 2023, \$12 million as of both May 31, 2022 and 2021, and \$11 million as of both May 31, 2020 and 2019.

⁽¹¹⁾On June 1, 2020, we adopted Accounting Standards Update (“ASU”) 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which replaces the incurred loss methodology previously used for estimating our allowance for credit losses with an expected loss methodology referred to as the current expected credit loss (“CECL”) model. Our allowance for credit losses prior to June 1, 2020 was determined based on the incurred loss methodology.

⁽¹²⁾Calculated based on total liabilities at period-end divided by total equity at period-end.

⁽¹³⁾Calculated based on available liquidity at period-end divided by the amount of maturing debt obligations over the next 12 months at period-end as of each respective date.

⁽¹⁴⁾Calculated based on total nonperforming loans at period-end divided by total loans outstanding at period-end.

⁽¹⁵⁾Calculated based on loans outstanding at period-end to borrowers with a risk rating that falls within the criticized risk rating category, which consists of special mention, substandard and doubtful, divided by total loans outstanding at period-end.

⁽¹⁶⁾Calculated based on the allowance for credit losses at period-end divided by total loans outstanding at period-end.

EXECUTIVE SUMMARY

As a member-owned, nonprofit finance cooperative, our primary objective is to provide our rural electric utility members with access to affordable, flexible financing products, while also maintaining a sound, stable financial position and adequate liquidity to meet our financial obligations and maintain ongoing investment-grade credit ratings. Because maximizing profit is not our primary objective, the interest rates on lending products offered to our member borrowers reflect our funding costs plus a spread to cover operating expenses and estimated credit losses, while also generating sufficient earnings to cover interest owed on our debt obligations and achieve certain financial target goals. Our financial goals focus on earning an annual minimum adjusted TIER of 1.10 and maintaining an adjusted debt-to-equity ratio at approximately 6.00-to-1 or below.

We are subject to period-to-period volatility in our reported U.S. GAAP results due to changes in market conditions and differences in the way our financial assets and liabilities are accounted for under U.S. GAAP. Our financial assets and liabilities expose us to interest-rate risk. We use derivatives, primarily interest rate swaps, as part of our strategy in managing this risk. Our derivatives are intended to economically hedge and manage the interest-rate sensitivity mismatch between our financial assets and liabilities. We are required under U.S. GAAP to carry derivatives at fair value on our consolidated balance sheets; however, the financial assets and liabilities for which we use derivatives to economically hedge are carried at amortized cost. Changes in interest rates and the shape of the swap curve result in periodic fluctuations in the fair value of our derivatives, which may cause volatility in our earnings because we do not apply hedge accounting for our interest rate swaps. As a result, the mark-to-market changes in our interest rate swaps are recorded in earnings. Because our derivative portfolio consists of a higher proportion of pay-fixed swaps, the majority of which are longer dated, than receive-fixed swaps, the majority of which are shorter dated, we generally record derivative losses when interest rates decline and derivative gains when interest rates rise. This earnings volatility generally is not indicative of the underlying economics of our business, as the derivative forward fair value gains or losses recorded each period may or may not be realized over time, depending on the terms of our derivative instruments and future changes in market conditions that impact the periodic cash settlement amounts of our interest rate swaps. Therefore, as discussed above under “Summary of Selected Financial Data,” management uses our non-GAAP financial measures to evaluate financial performance. Our adjusted financial results include the realized net periodic contractual interest expense amounts on our interest rate swaps but exclude the unrealized forward fair value gains and losses.

Financial Performance

Reported Results

We reported net income of \$502 million and TIER of 1.48 for fiscal year 2023 (“current fiscal year”), compared with net income of \$799 million and TIER of 2.13 for fiscal year ended May 31, 2022 (“fiscal year 2022” or “prior fiscal year”). Our debt-to-equity ratio decreased to 12.14 as of May 31, 2023, from 13.59 as of May 31, 2022, primarily due to an increase in equity resulting from our reported net income of \$502 million for fiscal year 2023, which was partially offset by a decrease in equity attributable to the CFC Board of Directors’ authorized patronage capital retirement in July 2022 of \$59 million.

The decrease in our reported net income of \$297 million to \$502 million for fiscal year 2023 from \$799 million for fiscal year 2022, was primarily driven by a reduction in derivative gains of \$171 million and a decrease in net interest income of \$120 million. We recorded derivative gains of \$286 million for fiscal year 2023, attributable to increases in interest rates

[Table of Contents](#)

across the entire swap curve during the period, with a more pronounced increase in short-term swap rates. In comparison, we recorded derivative gains of \$456 million for fiscal year 2022, attributable to increases in interest rates across the entire swap curve during the period, with a more pronounced increase in medium- and long-term swap rates. As noted above, the substantial majority of our swap portfolio consists of longer-dated, pay-fixed swaps. Therefore, increases and decreases in medium- and longer-term swap rates generally have a more pronounced corresponding impact on the change in the net fair value of our swap portfolio.

The decrease in net interest income of \$120 million, or 28%, to \$315 million for fiscal year 2023 was attributable to a decrease in the net interest yield of 48 basis points, or 33%, to 0.98%, partially offset by an increase in average interest-earning assets of \$2,366 million, or 8%. The decrease in the net interest yield reflected the combined impact of an increase in our average cost of borrowings of 91 basis points to 3.44%, partially offset by an increase in the average yield on our interest-earning assets of 37 basis points to 4.19% and an increase in the benefit from non-interest-bearing funding of 6 basis points to 0.23%. The increase in average interest-earning assets was primarily driven by growth in average total loans.

The increases in the average cost of borrowings and average yield on interest-earning assets were driven by the continued increase in the federal funds rate, which resulted in increases in the average cost of our short-term and variable-rate borrowings and the average yield earned on our line of credit and variable-rate loans. During fiscal year 2023, the Federal Open Market Committee (“FOMC”) of the Federal Reserve continued to further raise the target range for the federal funds rate at each of its meetings held through the period, with the federal funds rate reaching a target range of 5.00% to 5.25% as of May 31, 2023.

Other factors affecting the variance between our reported results for fiscal year 2023 and fiscal year 2022 include the impact of an unfavorable shift in the provision for credit losses of \$19 million and an increase in operating expenses of \$14 million, attributable to higher expenses recorded for salaries, information technology, business travel and in-person corporate meetings and events, partially offset by a reduction in losses recorded on our investment securities of \$25 million, primarily due to period-to-period market fluctuations in fair value.

We recorded a provision for credit losses of \$1 million for fiscal year 2023. In contrast, we recorded a benefit for credit losses of \$18 million for fiscal year 2022. The provision for credit losses for fiscal year 2023 stemmed primarily from an increase in the asset-specific allowance for loans to Brazos Electric Power Cooperative, Inc. (“Brazos”), its wholly-owned subsidiary Brazos Sandy Creek Electric Cooperative Inc. (“Brazos Sandy Creek”), and for a nonperforming CFC power supply loan, attributable to a reduction and timing change in the expected payments on this loan. The benefit for credit losses of \$18 million recorded for fiscal year 2022 was primarily attributable to a decrease in the collective allowance, stemming largely from positive developments related to Rayburn Country Electric Cooperative, Inc. (“Rayburn”), following its exposure to elevated wholesale electric power costs during the February 2021 polar vortex, that resulted in an improvement in fiscal year 2022 in Rayburn’s credit risk profile from fiscal year 2021 and also a significant reduction in loans outstanding to Rayburn.

Non-GAAP Adjusted Results

Adjusted net income totaled \$249 million and adjusted TIER was 1.25 for fiscal year 2023, compared with adjusted net income of \$241 million and adjusted TIER of 1.30 for fiscal year 2022. The adjusted TIER for both fiscal year 2023 and 2022 was well above our target of 1.10. Our goal is to maintain an adjusted debt-to-equity ratio of approximately 6.00-to-1. Our adjusted debt-to-equity ratio decreased to 6.04 as of May 31, 2023, from 6.24 as of May 31, 2022, primarily due to the May 2023 issuance of \$300 million of 7.125% subordinated deferrable debt due 2053.

The increase in adjusted net income of \$8 million to \$249 million for fiscal year 2023, from \$241 million for fiscal year 2022, was due primarily to an increase in adjusted net interest income of \$14 million and a reduction in losses recorded on our investment securities of \$25 million, partially offset by an unfavorable shift in the provision for credit losses of \$19 million and an increase in operating expenses of \$14 million. See above under “Reported Results” for a discussion on the drivers of the current fiscal year unfavorable shift in the provision for credit losses, increase in operating expenses and reduction in the losses recorded on our investment securities.

The increase in adjusted net interest income of \$14 million, or 4%, to \$349 million for fiscal year 2023 was attributable to an increase in average interest-earning assets of \$2,366 million, or 8%, primarily due to growth in average loans outstanding,

partially offset by a decrease in the adjusted net interest yield of 4 basis points, or 4%, to 1.08%. The decrease in our adjusted net interest yield reflected the combined impact of an increase in our adjusted average cost of borrowings of 44 basis points to 3.33%, partially offset by an increase in the average yield on interest-earning assets of 37 basis points to 4.19% and an increase in the benefit from non-interest bearing funding of 3 basis points to 0.22%.

See “Non-GAAP Financial Measures” for additional information on our non-GAAP financial measures, including a reconciliation of these measures to the most directly comparable U.S. GAAP financial measures.

Lending Activity

Loans to members totaled \$32,532 million as of May 31, 2023, an increase of \$2,469 million, or 8%, from May 31, 2022, reflecting net increases in long-term and line of credit loans of \$1,623 million and \$845 million, respectively. The \$845 million increase in line of credit loans was largely attributable to funding provided for higher operating costs that our members experienced, bridge loans due to delays in RUS financing and broadband bridge loan financing. We experienced increases in CFC distribution loans, CFC power supply loans, CFC statewide and associate loans, NCSC loans and RTFC loans of \$1,593 million, \$535 million, \$74 million, \$246 million and \$20 million, respectively.

Long-term loan advances totaled \$3,297 million during fiscal year 2023, of which approximately 95% was provided to members for capital expenditures and 2% was provided for the refinancing of loans made by other lenders. In comparison, long-term loan advances totaled \$3,386 million during fiscal year 2022, of which approximately 80% was provided to members for capital expenditures and 18% was provided to members for other expenses, primarily to fund operating expenses attributable to the elevated power cost obligations incurred during the February 2021 polar vortex. Of the \$3,297 million total long-term loans advanced during fiscal year 2023, \$2,849 million were fixed-rate loan advances with a weighted average fixed-rate term of 18 years. In comparison, of the \$3,386 million total long-term loans advanced during fiscal year 2022, \$2,911 million were fixed-rate loan advances with a weighted average fixed-rate term of 23 years.

Credit Quality

We believe the overall credit quality of our loan portfolio remained strong as of May 31, 2023. Historically, we have had limited defaults and losses on loans in our electric utility loan portfolio largely because of the essential nature of the service provided by electric utility cooperatives as well as other factors, such as limited rate regulation and competition, which we discuss further in the section “Credit Risk—Loan Portfolio Credit Risk.” In addition, we generally lend to members on a senior secured basis, which reduces the risk of loss in the event of a borrower default. Loans outstanding to electric utility organizations of \$32,032 million and \$29,584 million as of May 31, 2023 and 2022, respectively, represented approximately 99% and 98% of total loans outstanding as of each respective date. Of our total loans outstanding, 92% and 93% were secured as of May 31, 2023 and 2022, respectively.

We had loans to two borrowers totaling \$89 million classified as nonperforming as of May 31, 2023. In comparison we had loans to three borrowers totaling \$228 million classified as nonperforming as of May 31, 2022. Nonperforming loans represented 0.27% and 0.76% of total loans outstanding as of May 31, 2023 and 2022, respectively. The reduction in nonperforming loans of \$139 million during fiscal year 2023 was due to the receipt of loan principal payments, the partial charge-offs related to the Brazos and Brazos Sandy Creek nonperforming loans, and the classification of Brazos’ nonperforming loans to nonperforming troubled debt restructured (“TDR”) loans during the three months ended February 28, 2023 (“third quarter of fiscal year 2023”). Loans outstanding to Brazos and Brazos Sandy Creek, which filed for bankruptcy in March 2021 and March 2022, respectively, due to their exposure to elevated wholesale electric power costs during the February 2021 polar vortex, totaled \$27 million and \$114 million as of May 31, 2023 and 2022, respectively. Subsequent to the year ended May 31, 2023, we received the remaining loan payments of \$23 million and \$4 million from Brazos and Brazos Sandy Creek, respectively, to repay their loans in full.

We experienced charge-offs totaling \$15 million for the CFC electric power supply loan portfolio related to Brazos and Brazos Sandy Creek loans during fiscal year 2023, which resulted in a net charge-off rate of 0.05%. In comparison, we had no loan charge-offs during fiscal years 2022 and 2021. Prior to Brazos’ and Brazos Sandy Creek’s bankruptcy filings, we had not experienced any defaults or charge-offs in our electric utility and telecommunications loan portfolios since fiscal years 2013 and 2017, respectively.

See section “Credit Risk—Credit Quality Indicators” below for additional information on Brazos and Brazos Sandy Creek.

Our allowance for credit losses and allowance coverage ratio decreased to \$53 million and 0.16%, respectively, as of May 31, 2023, from \$68 million and 0.22%, respectively, as of May 31, 2022. The decrease in the allowance for credit losses of \$15 million reflected reductions in the asset-specific allowance and collective allowance of \$13 million and \$2 million, respectively.

We discuss our methodology for estimating the allowance for credit losses in “Note 1—Summary of Significant Accounting Policies” of this Report. We also provide additional information on the credit quality of our loan portfolio and the allowance for credit losses below in the sections “Critical Accounting Estimates” and “Credit Risk—Allowance for Credit Losses” and “Note 4—Loans” and “Note 5—Allowance for Credit Losses” of this Report.

Financing Activity

We issue debt primarily to fund growth in our loan portfolio. As such, our debt outstanding generally increases and decreases in response to member loan demand. Total debt outstanding increased by \$2,252 million, or 8%, to \$30,999 million as of May 31, 2023, due to borrowings to fund the increase in loans to members. Outstanding dealer commercial paper of \$1,293 million as of May 31, 2023 was within our quarter-end target range. Our goal is to maintain the dealer commercial paper balance at each quarter-end within a range of \$1,000 million to \$1,500 million. We provide additional information on our financing activities during fiscal year 2023 in the below section “Liquidity Risk” of this Report. Subsequent to the year ended May 31, 2023, we issued \$400 million aggregate principal amount of dealer medium-term notes at a fixed rate of 5.05% due on September 15, 2028, redeemed \$100 million in principal amount of our \$400 million subordinated deferrable debt due 2043, at par plus accrued interest, and borrowed \$500 million in short-term notes payable under the note purchase agreement with Farmer Mac.

During the current fiscal year, Moody’s Investors Service (“Moody’s”), S&P Global Inc. (“S&P”) and Fitch Ratings (“Fitch”) affirmed CFC’s credit ratings and stable outlook. Table 31 presents our credit ratings for each CFC debt product type as of May 31, 2023, which remain unchanged as of the date of this Report, in the below section “Liquidity Risk—Credit Ratings” of this Report.

Liquidity

In addition to cash on hand, our primary sources of funds include member loan principal repayments, securities held in our investment portfolio, committed bank revolving lines of credit, committed loan facilities under the Guaranteed Underwriter Program, revolving note purchase agreement with Farmer Mac and proceeds from debt issuances to our members and in the public capital markets. Although as a nonbank financial institution we are not subject to regulatory liquidity requirements, we monitor our liquidity and funding positions on an ongoing basis and assess our ability to meet our scheduled debt obligations and other cash flow requirements based on point-in-time metrics as well as forward-looking projections. Our liquidity and funding assessment takes into consideration amounts available under existing liquidity sources, the expected rollover of member short-term investments and scheduled loan principal repayment amounts, as well as our continued ability to access the public capital markets and other non-capital market-related funding sources.

As of May 31, 2023, our available liquidity totaled \$7,147 million, consisting of (i) cash and cash equivalents of \$199 million; (ii) investments in debt securities with an aggregate fair value of \$475 million, which is subject to changes based on market fluctuations; (iii) up to \$2,598 million available under committed bank revolving line of credit agreements; (iv) up to \$1,025 million available under committed loan facilities under the Guaranteed Underwriter Program; and (v) up to \$2,850 million available under a revolving note purchase agreement with Farmer Mac, subject to market conditions. In addition to our existing available liquidity of \$7,147 million as of May 31, 2023, we expect to receive \$1,495 million from scheduled long-term loan principal payments over the next 12 months.

Debt scheduled to mature over the next 12 months totaled \$6,929 million as of May 31, 2023, consisting of short-term borrowings of \$4,546 million and long-term and subordinated debt of \$2,383 million. The short-term borrowings scheduled maturity amount of \$4,546 million consists of member investments of \$3,253 million and dealer commercial paper of \$1,293 million. The long-term and subordinated scheduled debt obligations over the next 12 months of \$2,383 million consist of debt maturities and scheduled debt payment amounts, of which, \$192 million was from member investments.

Our available liquidity of \$7,147 million as of May 31, 2023, was \$218 million in excess of, or 1.03 times, our total scheduled debt obligations over the next 12 months of \$6,929 million. We believe we can continue to roll over our member short-term investments of \$3,253 million as of May 31, 2023, based on our expectation that our members will continue to reinvest their excess cash in short-term investment products offered by CFC. Our members historically have maintained a relatively stable level of short-term investments in CFC in the form of commercial paper, select notes, daily liquidity fund notes and medium-term notes. Member short-term investments in CFC have averaged \$3,646 million over the last 12 fiscal quarter-end reporting periods. Our available liquidity of \$7,147 million as of May 31, 2023 was \$3,471 million in excess of, or 1.9 times, our total scheduled debt obligations, excluding member short-term investments, over the next 12 months of \$3,676 million.

We expect to continue accessing the dealer commercial paper market as a cost-effective means of satisfying our incremental short-term liquidity needs. Although the intra-period amount of dealer commercial paper outstanding may fluctuate based on our liquidity requirements, our intent is to manage our short-term wholesale funding risk by maintaining the dealer commercial paper outstanding at each quarter-end within a range of \$1,000 million to \$1,500 million. To mitigate commercial paper rollover risk, we expect to continue to maintain our committed bank revolving line of credit agreements and be in compliance with the covenants of these agreements, as we can draw on these facilities, if necessary, to repay dealer or member commercial paper that cannot be refinanced with similar debt. In addition, under master repurchase agreements we have with our bank counterparties, we can obtain short-term funding in secured borrowing transactions by selling investment-grade corporate debt securities from our investment securities portfolio subject to an obligation to repurchase the same or similar securities at an agreed-upon price and date.

The issuance of long-term debt, which represents the most significant component of our funding, allows us to reduce our reliance on short-term borrowings, as well as effectively manage our refinancing and interest rate risk. We expect to continue to issue long-term debt in the public capital markets and under our other non-capital market debt arrangements to meet our funding needs and believe that we have sufficient sources of liquidity to meet our debt obligations and support our operations over the next 12 months.

We provide additional information on our liquidity profile and our primary sources and uses of funds, including projected amounts, by quarter, over each of the next six fiscal quarters through the quarter ending November 30, 2024, in the “Liquidity Risk” section of this Report.

Electric Cooperative Industry Trends and Developments

Emerging developments and trends in the electric cooperative sector continue to present opportunities as well as challenges for our electric cooperative members. These trends include (i) expanded investments by many electric cooperatives to deploy broadband services to their members; (ii) inflation, supply chain challenges and labor shortages; (iii) increased federal government programs and policies for electric utilities; (iv) an increased focus on enhancing electric system resiliency and reliability; (v) continued interest in renewable energy investments; and (vi) growing support of beneficial electrification strategies to reduce overall carbon emissions, while also providing benefits to cooperative members.

Expanded Investments to Deploy Broadband Services

Many rural electric distribution cooperatives have made or are making infrastructure investments that include building fiber optic lines to improve electric grid system reliability, efficiency and cost savings, as fiber operations offer enhanced communication to monitor electric systems, identify outages and speed electric restoration. Some of these electric cooperatives are leveraging these fiber assets to offer access to broadband services, either directly or by partnering with local telecommunication companies and others, to the communities they serve. We are currently aware of 198 broadband projects by different CFC member cooperatives, and we financed or are financing 123 of these 198 broadband projects. Capital expenditures for the completion of these 198 broadband projects are expected to total approximately \$11,369 million. We believe that the capital expenditures for the completion of the broadband projects that we financed or are financing will total approximately \$4,631 million. Our aggregate loans outstanding to CFC electric distribution cooperative members relating to broadband projects, which we started tracking in October 2017, increased to an estimated \$2,355 million as of May 31, 2023, from approximately \$1,647 million as of May 31, 2022. The three states with the largest CFC loans outstanding for broadband projects were Indiana, Arkansas and Oklahoma as of May 31, 2023, and broadband loans outstanding for these states totaled \$300 million, \$273 million and \$253 million, respectively, as of this date. Many of

these broadband projects are also financially supported by various states and the federal government, which reduces the credit risk for CFC and the investment risk for our electric cooperative members. We expect our member electric cooperatives to continue in their efforts to expand broadband access to unserved and underserved communities.

Inflation, Supply Chain Disruptions and Labor Shortage

Many rural electric cooperatives are experiencing increasing cost in power supply, labor and materials. Power supply cost for many cooperatives is increasingly volatile based on natural gas and coal market pricing. In addition to increasing material cost, supply chain disruptions have extended delivery times for utility hardware and are causing project timelines to be extended as well. Labor cost and competition for employees has increased for some cooperatives due to labor shortages.

Federal Government Programs and Policies

The federal government has created various funding opportunities that electric cooperatives may take advantage of when deploying renewable energy and other clean energy technologies. The 2022 Inflation Reduction Act (“IRA”) included programs such as the USDA Empowering Rural American program, the Powering Affordable Clean Energy program and a direct-pay tax provision for electric cooperatives.

The federal government has also rolled out regulations such as the Environmental Protection Agency’s (“EPA”) proposed greenhouse gas emission requirements for new and existing power plants. The EPA is in the midst of an open comment period, and CFC and electric cooperative partners are monitoring the potential impact to cooperatives. It is highly likely that the rule will be litigated similar to the Obama Administration’s Clean Power Plan.

Increased Focus on Enhancing Electric System Resiliency and Reliability

We have observed an increase in capital investments by electric cooperatives to proactively strengthen existing electric systems as well as replace systems in the aftermath of damages from recent weather-related incidents, including hurricanes and winter storms. We believe that the adverse impact on electric systems from weather-related incidents and wildfires has resulted in a heightened awareness by electric cooperatives of the need to focus attention on making infrastructure upgrades to improve both the resiliency and reliability of electric systems.

Evolving Cooperative Focus on Clean Energy Supply Investments

We also have observed that many electric power supply and electric distribution cooperatives are increasingly focused on efforts to identify potential opportunities to increase investments in renewable power supply, transmission and storage. This includes both on-balance sheet construction of renewable generation and off-balance sheet acquisition of renewable power through power purchase agreements. According to a report published in April 2023 by NRECA, electric cooperatives more than doubled their renewable capacity from 5.7 gigawatts to nearly 14 gigawatts in the last decade, including adding 900 megawatts of renewable capacity in 2022 alone.

Growing Support for Beneficial Electrification

Rural electric cooperatives have become increasingly supportive of beneficial electrification, which refers to the replacement of fossil fuel-powered systems with electrical ones such as electric vehicles and heat pumps in a way that reduces overall emissions, while providing benefits to the environment and to households. The increased support among electric cooperatives reflects an expectation that beneficial electrification will result in increased sales, while also saving money for members and reducing carbon emissions.

We believe the above trends and current investment priorities of our electric cooperative members will require funding and may result in an increased demand for capital from CFC.

Outlook

As further described below in the “Liquidity Risk—Projected Near-Term Sources and Uses of Funds” section, we currently anticipate net long-term loan growth of \$1,632 million over the next 12 months. In June 2023, the FOMC of the Federal Reserve signaled an expectation of further increases in the federal funds rate and pointed to a consensus target rate of 5.60%

[Table of Contents](#)

by December 31, 2023, stating its continued objective of returning the inflation rate to 2% over the longer run. In addition, the FOMC projections include a decrease in the federal funds rate to a target rate of 4.60% by December 31, 2024. As a result, the June 2023 consensus market outlook for interest rates indicated rising interest rates across the yield curve during the remainder of 2023, followed by a decrease in short-term interest rates during 2024. The yield curve is expected to remain inverted for the remainder of 2023 and, given the expected drop in short-term interest rates in the following year, the yield curve inversion is expected to narrow in 2024, and remain inverted beyond that period. Based on this yield curve forecast, we anticipate a decrease in our reported net interest income and reported net interest yield over the next 12 months relative to the 12-month period ended May 31, 2023. However, we project an increase in our adjusted net interest income over the next 12 months compared with the 12-month period ended May 31, 2023. This is primarily attributable to the expected significant increase in our derivative net periodic cash settlements income, which will contribute to reducing our adjusted cost of borrowings. Additionally, we anticipate a sustained expansion of our loan portfolio, with the variable-rate line of credit loans outstanding remaining at an elevated level. We anticipate a slight decrease in our adjusted net interest yield over the next 12 months relative to the 12-month period ended May 31, 2023, due to the current yield curve assumptions and our balance sheet position.

We expect that our adjusted net income will increase over the next 12 months, primarily attributable to our projected increase in adjusted net interest income. However, we believe that our adjusted TIER will decrease slightly over the next 12 months, primarily attributable to our projected increase in adjusted interest expense. We believe that our adjusted debt-to-equity ratio will remain elevated above our target of 6.00-to-1, primarily due to the early redemption of \$100 million of our subordinated deferrable debt in June 2023, the projected increase in total debt outstanding to fund anticipated growth in our loan portfolio and the expected retirement of discounted patronage capital as part of RTFC's consolidation with NCSC. In April 2023 and June 2023, RTFC's and NCSC's members, respectively, approved the sale of RTFC's business to NCSC. We intend to complete the consolidation of RTFC and NCSC over the next 12 months, subject to meeting certain closing conditions. As part of the consolidation, CFC intends to retire CFC's allocated but unretired patronage capital to RTFC at a discount, which we expect to occur during the second quarter of fiscal year 2024, and subsequently, RTFC intends to retire the allocated but unretired patronage capital to its members at a discount.

As discussed above, we are subject to earnings volatility, often significant, because we do not apply hedge accounting to our interest rate swaps. Therefore, the periodic unrealized fluctuations in the fair value of our interest rate swaps are recorded in our earnings. The variances in our earnings between periods are generally attributable to significant shifts in recorded unrealized derivative forward value gain and loss amounts. We exclude the impact of unrealized derivative forward fair value gains and losses from our non-GAAP financial measures.

We are unable to provide a reconciliation of our projected adjusted net income, adjusted TIER and adjusted debt-to-equity ratio to the most directly comparable GAAP financial measures or directional guidance for the most directly comparable GAAP financial measures on a forward-looking basis without unreasonable effort due to the significant shifts in the unrealized derivative forward value gains and losses recorded each period. The majority of our swaps are long term, with an average remaining life of approximately 15 years as of May 31, 2023. We can reasonably estimate the realized net periodic derivative cash settlement amounts over the next 12 months for our interest rate swaps, which are typically based on SOFR and the fixed rate of the swap. In contrast, the unrealized periodic derivative forward value gains and losses are largely based on future expected changes in longer-term interest rates, which we are unable to accurately predict for each reporting period over the next 12 months. Because unrealized periodic derivative forward value gain and loss amounts are a key driver of changes in our earnings between periods, this unavailable information is likely to have a significant impact on our reported net income, TIER and debt-to-equity ratio, which represent the most directly comparable GAAP financial measures. We provide reconciliations of our non-GAAP adjusted net income, adjusted TIER and adjusted debt-to-equity ratio to the most directly comparable GAAP financial measures for each reporting period included in this Report in the section "Non-GAAP Financial Measures." These reconciliations illustrate the potential significant impact that unrealized derivative forward value gains and losses could have on our future reported net income, reported TIER and reported debt-to-equity ratio.

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with U.S. GAAP requires management to make a number of judgments, estimates and assumptions that affect the reported amount of assets, liabilities, income and expenses in our consolidated financial statements. Understanding our accounting policies and the extent to which we use management's judgment and estimates in applying these policies is integral to understanding our financial statements. We provide a discussion of our significant accounting policies in "Note 1—Summary of Significant Accounting Policies."

Certain accounting estimates are considered critical because they involve significant judgments and assumptions about highly complex and inherently uncertain matters, and the use of reasonably different estimates and assumptions could have a material impact on our results of operations or financial condition. The determination of the allowance for expected credit losses over the remaining expected life of the loans in our loan portfolio involves a significant degree of management judgment and level of estimation uncertainty. As such, we have identified our accounting policy governing the estimation of the allowance for credit losses as a critical accounting estimate. Management established policies and control procedures intended to ensure that the methodology used for determining our allowance for credit losses, including any judgments and assumptions made as part of such method, are well-controlled and applied consistently from period to period. We evaluate our critical accounting estimates and judgments required by our policies on an ongoing basis and update them as necessary based on changing conditions. We describe our allowance methodology and process for estimating the allowance for credit losses under "Note 1—Summary of Significant Accounting Policies—Allowance for Credit Losses—Loan Portfolio—Current Methodology."

We maintain an allowance based on a current estimate of credit losses that are expected to occur over the remaining life of the loans in our portfolio. The methods utilized to estimate the allowance for credit losses, key assumptions and quantitative and qualitative information considered by management in determining the appropriate allowance for credit losses are discussed in "Note 1—Summary of Significant Accounting Policies."

Key inputs, such as our historical loss data and third-party default data, that we use in determining the appropriate allowance for credit losses are more readily quantifiable, while other inputs, such as our internally assigned borrower risk ratings that are intended to assess a borrower's capacity to meet its financial obligations and provide information on the probability of default, require more qualitative judgment. Degrees of imprecision exist in each of these inputs due in part to subjective judgments involved and an inherent lag in the data available to quantify current conditions and events that may affect our credit loss estimate.

Our internally assigned borrower risk ratings serve as the primary credit quality indicator for our loan portfolio. We perform an annual comprehensive review of each of our borrowers, following the receipt of the borrower's annual audited financial statements, to reassess the borrower's risk rating. In addition, interim risk-rating adjustments may occur as a result of updated information affecting a borrower's ability to fulfill its obligations or other significant developments and trends. Our Credit Risk Management Group and Corporate Credit Committee review and provide rigorous oversight and governance around our internally assigned risk ratings to ensure the ratings process is consistent. In addition, we engage third-party credit risk management experts to conduct an independent annual review of our risk rating system to validate its overall integrity. This review involves an evaluation of the accuracy and timeliness of individual risk ratings and the overall effectiveness of our risk-rating framework relative to the risk profile of our credit exposures. While we have a robust risk-rating process, changes in our borrower risk ratings may not always directly coincide with changes in the risk profile of an individual borrower due to the timing of the rating process and a potential lag in the receipt of information necessary to evaluate the impact of emerging developments and current conditions on the risk ratings of our borrower. Although our allowance for credit losses is sensitive to each key input, shifts in the credit risk ratings of our borrowers generally have the most notable impact on our allowance for credit losses.

Allowance for Credit Losses

Our allowance for credit losses and allowance coverage ratio decreased to \$53 million and 0.16%, respectively, as of May 31, 2023, from \$68 million and 0.22%, respectively, as of May 31, 2022. The decrease in the allowance for credit losses of \$15 million reflected reductions in the asset-specific allowance and collective allowance of \$13 million and \$2 million, respectively. We discuss the methodology used to estimate the allowance for credit losses in "Note 1—Summary of Significant Accounting Policies."

Key Assumptions

Determining the appropriateness of the allowance for credit losses is subject to numerous estimates and assumptions requiring significant management judgment about matters that involve a high degree of subjectivity and are difficult to predict. The key assumptions in determining our collective allowance that require significant management judgment and may have a material impact on the amount of the allowance include the segmentation of our loan portfolio; our internally assigned borrower risk ratings; the probability of default; the loss severity or recovery rate in the event of default for each portfolio segment; and management's consideration of qualitative factors that may cause estimated credit losses associated with our existing loan portfolio to differ from our historical loss experience.

As discussed below in "Credit Risk—Loan Portfolio Credit Risk," CFC has experienced only 18 defaults in its 54-year history, and prior to Brazos and Brazos Sandy Creek we had no defaults in our electric utility loan portfolio since fiscal year 2013. As such, we have a limited history of defaults to develop reasonable and supportable estimated probability of default rates for our existing loan portfolio. We therefore utilize third-party default data for the utility sector as a proxy to estimate probability of default rates for our loan portfolio segments. However, we utilize our internal historical loss experience to estimate loss given default, or the recovery rate, for each of our loan portfolio segments. We believe our internal historical loss experience serves as a more reliable estimate of loss severity than third-party data due to the organizational structure and operating environment of rural utility cooperatives, our lending practice of generally requiring a senior security position on the assets and revenue of borrowers for long-term loans, the approach we take in working with borrowers that may be experiencing operational or financial issues and other factors discussed in "Credit Risk—Loan Portfolio Credit Risk."

We generally consider nonperforming loans as well as loans that have been or are anticipated to be modified under a TDR for individual evaluation given the risk characteristics of such loans and establish an asset-specific allowance for these loans. The key assumptions in determining our asset-specific allowance that require significant management judgment and may have a material impact on the amount of the allowance include measuring the amount and timing of future cash flows for individually evaluated loans that are not collateral-dependent and estimating the value of the underlying collateral for individually evaluated loans that are collateral-dependent.

The degree to which any particular assumption affects the allowance for credit losses depends on the severity of the change and its relationship to the other assumptions. We regularly evaluate the key inputs and assumptions used in determining the allowance for credit losses and update them, as necessary, to better reflect present conditions, including current trends in credit performance and borrower risk profile, portfolio concentration risk, changes in risk-management practices, changes in the regulatory environment and other factors relevant to our loan portfolio segments. We did not change our allowance methodology or the nature of the underlying key inputs and assumptions used in measuring our allowance for credit losses during fiscal year 2023.

Sensitivity Analysis

As noted above, our allowance for credit losses is sensitive to a variety of factors. While management uses its best judgment to assess loss data and other factors to determine the allowance for credit losses, changes in our loss assumptions, adjustments to assigned borrower risk ratings, the use of alternate external data sources or other factors could affect our estimate of probable credit losses inherent in the portfolio as of each balance sheet date, which would also impact the related provision for credit losses recognized in our consolidated statements of operations. For example, changes in the inputs below, without taking into consideration the impact of other potential offsetting or correlated inputs, would have the following effect on our allowance of credit losses as of May 31, 2023.

- A 10% increase or decrease in the default rates for all of our portfolio segments would result in a corresponding increase or decrease of approximately \$3 million.
- A 1% increase or decrease in the recovery rates for all of our portfolio segments would result in a corresponding decrease or increase of approximately \$9 million.
- A one-notch downgrade in the internal borrower risk ratings for our entire loan portfolio would result in an increase of approximately \$26 million, while a one-notch upgrade would result in a decrease of approximately \$16 million.

These sensitivity analyses are intended to provide an indication of the isolated impact of hypothetical alternative assumptions on our allowance for credit losses. Because management evaluates a variety of factors and inputs in

determining the allowance for credit losses, these sensitivity analyses are not considered probable and do not imply an expectation of future changes in loss rates or borrower risk ratings. Given current processes employed in estimating the allowance for credit losses, management believes the inherent loss rates and currently assigned risk ratings are appropriate. It is possible that others performing the analyses, given the same information, may at any point in time reach different reasonable conclusions that could be significant to our consolidated financial statements.

We discuss the risks and uncertainties related to management's judgments and estimates in applying accounting policies that have been identified as a critical accounting estimates under "Item 1A. Risk Factors—Regulatory and Compliance Risks" in this Report. We provide additional information on the allowance for credit losses under the below section "Credit Risk—Allowance for Credit Losses" and "Note 5—Allowance for Credit Losses" in this Report.

RECENT ACCOUNTING CHANGES AND OTHER DEVELOPMENTS

Recent Accounting Changes

We provide information on recently adopted accounting standards and the adoption impact on CFC's consolidated financial statements and recently issued accounting standards not yet required to be adopted and the expected adoption impact in "Note 1—Summary of Significant Accounting Policies." To the extent we believe the adoption of new accounting standards has had or will have a material impact on our consolidated results of operations, financial condition or liquidity, we discuss the impact in the applicable section(s) of this MD&A.

CONSOLIDATED RESULTS OF OPERATIONS

This section provides a comparative discussion of our consolidated results of operations between fiscal years 2023 and 2022. Following this section, we provide a discussion and analysis of material changes in amounts reported on our consolidated balance sheet as of May 31, 2023 and 2022. You should read these sections together with our "Executive Summary—Outlook" where we discuss trends and other factors that we expect will affect our future results of operations. See "Item 7. MD&A—Consolidated Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended May 31, 2022 ("2022 Form 10-K") for a comparative discussion of our consolidated results of operations between fiscal year 2022 and the fiscal year ended May 31, 2021 ("fiscal year 2021").

Net Interest Income

Net interest income, which is our largest source of revenue, represents the difference between the interest income earned on our interest-earning assets and the interest expense on our interest-bearing liabilities. Our net interest yield represents the difference between the yield on our interest-earning assets and the cost of our interest-bearing liabilities plus the impact of non-interest-bearing funding. We expect net interest income and our net interest yield to fluctuate based on changes in interest rates and changes in the amount and composition of our interest-earning assets and interest-bearing liabilities. We do not fund each individual loan with specific debt. Rather, we attempt to minimize costs and maximize efficiency by proportionately funding large aggregated amounts of loans.

Table 2 presents average balances for fiscal years 2023, 2022 and 2021, and for each major category of our interest-earning assets and interest-bearing liabilities, the interest income earned or interest expense incurred, and the average yield or cost. Table 2 also presents non-GAAP adjusted interest expense, adjusted net interest income and adjusted net interest yield, which reflect the inclusion of net accrued periodic derivative cash settlements expense in interest expense. We provide reconciliations of our non-GAAP financial measures to the most comparable U.S. GAAP financial measures under "Non-GAAP Financial Measures."

Table 2: Average Balances, Interest Income/Interest Expense and Average Yield/Cost

(Dollars in thousands)	Year Ended May 31,								
	2023			2022			2021		
	Average Balance	Interest Income/Expense	Average Yield/Cost	Average Balance	Interest Income/Expense	Average Yield/Cost	Average Balance	Interest Income/Expense	Average Yield/Cost
Assets:									
Long-term fixed-rate loans ⁽¹⁾	\$27,615,174	\$1,138,877	4.12 %	\$25,974,724	\$1,062,223	4.09 %	\$24,978,267	\$1,051,524	4.21 %
Long-term variable-rate loans	868,087	46,045	5.30	749,131	16,895	2.26	645,819	14,976	2.32
Line of credit loans	2,785,202	146,031	5.24	2,148,197	46,887	2.18	1,626,092	35,596	2.19
TDR loans	20,205	727	3.60	9,528	735	7.71	10,328	790	7.65
Nonperforming loans	165,631	—	—	227,795	—	—	185,554	—	—
Other, net ⁽²⁾	—	(1,536)	—	—	(1,448)	—	—	(1,381)	—
Total loans	<u>31,454,299</u>	<u>1,330,144</u>	<u>4.23</u>	<u>29,109,375</u>	<u>1,125,292</u>	<u>3.87</u>	<u>27,446,060</u>	<u>1,101,505</u>	<u>4.01</u>
Cash and investment securities	783,340	21,585	2.76	762,489	15,951	2.09	796,566	15,096	1.90
Total interest-earning assets	<u>\$32,237,639</u>	<u>\$1,351,729</u>	<u>4.19 %</u>	<u>\$29,871,864</u>	<u>\$1,141,243</u>	<u>3.82 %</u>	<u>\$28,242,626</u>	<u>\$1,116,601</u>	<u>3.95 %</u>
Other assets, less allowance for credit losses ⁽³⁾	942,621			466,329			537,506		
Total assets ⁽³⁾	<u>\$33,180,260</u>			<u>\$30,338,193</u>			<u>\$28,780,132</u>		
Liabilities:									
Commercial paper	\$ 2,718,934	\$ 98,751	3.63 %	\$ 2,565,629	\$ 11,086	0.43 %	\$ 2,189,558	\$ 8,330	0.38 %
Other short-term borrowings	2,102,341	67,210	3.20	2,006,020	7,179	0.36	2,148,767	6,400	0.30
Short-term borrowings ⁽⁴⁾	4,821,275	165,961	3.44	4,571,649	18,265	0.40	4,338,325	14,730	0.34
Medium-term notes	6,206,717	198,711	3.20	4,854,421	108,769	2.24	3,904,603	113,582	2.91
Collateral trust bonds	7,366,266	271,247	3.68	7,050,468	248,413	3.52	6,938,534	249,248	3.59
Guaranteed Underwriter Program notes payable	6,364,870	185,097	2.91	6,165,206	169,166	2.74	6,146,410	167,403	2.72
Farmer Mac notes payable	3,166,098	108,557	3.43	3,059,946	55,245	1.81	2,844,252	50,818	1.79
Other notes payable	3,424	88	2.57	6,774	155	2.29	10,246	241	2.35
Subordinated deferrable debt	991,488	53,119	5.36	986,407	51,541	5.23	986,209	51,551	5.23
Subordinated certificates	1,230,625	53,728	4.37	1,245,120	53,980	4.34	1,270,385	54,490	4.29
Total interest-bearing liabilities	<u>\$30,150,763</u>	<u>\$1,036,508</u>	<u>3.44 %</u>	<u>\$27,939,991</u>	<u>\$ 705,534</u>	<u>2.53 %</u>	<u>\$26,438,964</u>	<u>\$ 702,063</u>	<u>2.66 %</u>
Other liabilities ⁽³⁾	618,422			897,751			1,380,414		
Total liabilities ⁽³⁾	<u>30,769,185</u>			<u>28,837,742</u>			<u>27,819,378</u>		
Total equity ⁽³⁾	<u>2,411,075</u>			<u>1,500,451</u>			<u>960,754</u>		
Total liabilities and equity ⁽³⁾	<u>\$33,180,260</u>			<u>\$30,338,193</u>			<u>\$28,780,132</u>		
Net interest spread ⁽⁵⁾			0.75 %			1.29 %			1.29 %
Impact of non-interest-bearing funding ⁽⁶⁾			0.23			0.17			0.18
Net interest income/net interest yield ⁽⁷⁾		<u>\$ 315,221</u>	<u>0.98 %</u>		<u>\$ 435,709</u>	<u>1.46 %</u>		<u>\$ 414,538</u>	<u>1.47 %</u>
Adjusted net interest income/adjusted net interest yield:									
Interest income		\$1,351,729	4.19 %		\$1,141,243	3.82 %		\$1,116,601	3.95 %
Interest expense		1,036,508	3.44		705,534	2.53		702,063	2.66
Add: Net periodic derivative cash settlements interest (income) expense ⁽⁸⁾		(33,577)	(0.44)		101,385	1.21		115,645	1.28
Adjusted interest expense/adjusted average cost ⁽⁹⁾		<u>\$1,002,931</u>	<u>3.33 %</u>		<u>\$ 806,919</u>	<u>2.89 %</u>		<u>\$ 817,708</u>	<u>3.09 %</u>
Adjusted net interest spread ⁽⁷⁾			0.86 %			0.93 %			0.86 %
Impact of non-interest-bearing funding ⁽⁶⁾			0.22			0.19			0.20
Adjusted net interest income/adjusted net interest yield ⁽¹⁰⁾		<u>\$ 348,798</u>	<u>1.08 %</u>		<u>\$ 334,324</u>	<u>1.12 %</u>		<u>\$ 298,893</u>	<u>1.06 %</u>

[Table of Contents](#)

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- (1) Interest income on long-term, fixed-rate loans includes loan conversion fees, which are generally deferred and recognized as interest income using the effective interest method.
- (2) Consists of late payment fees and net amortization of deferred loan fees and loan origination costs.
- (3) The average balance represents average monthly balances, which is calculated based on the month-end balance as of the beginning of the reporting period and the balances as of the end of each month included in the specified reporting period.
- (4) Short-term borrowings reported on our consolidated balance sheets consist of borrowings with an original contractual maturity of one year or less. However, short-term borrowings presented in Table 2 consist of commercial paper, select notes, daily liquidity fund notes and secured borrowings under repurchase agreements. Short-term borrowings presented on our consolidated balance sheets related to medium-term notes, Farmer Mac notes payable and other notes payable are reported in the respective category for presentation purposes in Table 2. The period-end amounts reported as short-term borrowings on our consolidated balance sheets, which are excluded from the calculation of average short-term borrowings presented in Table 2, totaled \$367 million, \$417 million and \$363 million as of May 31, 2023, 2022 and 2021, respectively.
- (5) Net interest spread represents the difference between the average yield on total average interest-earning assets and the average cost of total average interest-bearing liabilities. Adjusted net interest spread represents the difference between the average yield on total average interest-earning assets and the adjusted average cost of total average interest-bearing liabilities.
- (6) Includes other liabilities and equity.
- (7) Net interest yield is calculated based on net interest income for the period divided by total average interest-earning assets for the period.
- (8) Represents the impact of net periodic contractual interest amounts on our interest rate swaps during the period. This amount is added to interest expense to derive non-GAAP adjusted interest expense. The average (benefit)/cost associated with derivatives is calculated based on net periodic swap settlement interest amount during the period divided by the average outstanding notional amount of derivatives during the period. The average outstanding notional amount of interest rate swaps was \$7,668 million, \$8,406 million and \$9,062 million for fiscal years 2023, 2022 and 2021, respectively.
- (9) Adjusted interest expense consists of interest expense plus net periodic derivative cash settlements interest income (expense) during the period. Net periodic derivative cash settlements interest income (expense) is reported on our consolidated statements of operations as a component of derivative gains (losses). Adjusted average cost is calculated based on the adjusted interest expense for the period divided by total average interest-bearing liabilities during the period.
- (10) Adjusted net interest yield is calculated based on adjusted net interest income for the period divided by total average interest-earning assets for the period.

Table 3 displays the change in net interest income between periods and the extent to which the variance for each category of interest-earning assets and interest-bearing liabilities is attributable to (i) changes in volume, which represents the change in the average balances of our interest-earning assets and interest-bearing liabilities or volume, and (ii) changes in the rate, which represents the change in the average interest rates of these assets and liabilities. The table also presents the change in adjusted net interest income between periods.

Table 3: Rate/Volume Analysis of Changes in Interest Income/Interest Expense

(Dollars in thousands)	2023 versus 2022			2022 versus 2021		
	Total Variance	Variance Due To: ⁽¹⁾		Total Variance	Variance Due To: ⁽¹⁾	
		Volume	Rate		Volume	Rate
Interest income:						
Long-term fixed-rate loans	\$ 76,654	\$ 67,085	\$ 9,569	\$ 10,699	\$ 41,948	\$ (31,249)
Long-term variable-rate loans	29,150	2,683	26,467	1,919	2,396	(477)
Line of credit loans	99,144	13,903	85,241	11,291	11,429	(138)
TDR loans	(8)	824	(832)	(55)	(61)	6
Other, net	(88)	—	(88)	(67)	—	(67)
Total loans	<u>204,852</u>	<u>84,495</u>	<u>120,357</u>	<u>23,787</u>	<u>55,712</u>	<u>(31,925)</u>
Cash and investment securities	5,634	436	5,198	855	(646)	1,501
Total interest income	<u>\$ 210,486</u>	<u>\$ 84,931</u>	<u>\$ 125,555</u>	<u>\$ 24,642</u>	<u>\$ 55,066</u>	<u>\$ (30,424)</u>
Interest expense:						
Commercial paper	\$ 87,665	\$ 662	\$ 87,003	\$ 2,756	\$ 1,431	\$ 1,325
Other short-term borrowings	60,031	345	59,686	779	(425)	1,204
Short-term borrowings	147,696	1,007	146,689	3,535	1,006	2,529
Medium-term notes	89,942	30,300	59,642	(4,813)	27,629	(32,442)
Collateral trust bonds	22,834	11,127	11,707	(835)	4,021	(4,856)
Guaranteed Underwriter Program notes payable	15,931	5,479	10,452	1,763	512	1,251
Farmer Mac notes payable	53,312	1,916	51,396	4,427	3,854	573
Other notes payable	(67)	(77)	10	(86)	(82)	(4)
Subordinated deferrable debt	1,578	265	1,313	(10)	10	(20)
Subordinated certificates	(252)	(628)	376	(510)	(1,084)	574
Total interest expense	<u>330,974</u>	<u>49,389</u>	<u>281,585</u>	<u>3,471</u>	<u>35,866</u>	<u>(32,395)</u>
Net interest income	<u>\$ (120,488)</u>	<u>\$ 35,542</u>	<u>\$ (156,030)</u>	<u>\$ 21,171</u>	<u>\$ 19,200</u>	<u>\$ 1,971</u>
Adjusted net interest income:						
Interest income	\$ 210,486	\$ 84,931	\$ 125,555	\$ 24,642	\$ 55,066	\$ (30,424)
Interest expense	330,974	49,389	281,585	3,471	35,866	(32,395)
Net periodic derivative cash settlements interest income ⁽²⁾	(134,962)	(8,905)	(126,057)	(14,260)	(8,367)	(5,893)
Adjusted interest expense ⁽³⁾	<u>196,012</u>	<u>40,484</u>	<u>155,528</u>	<u>(10,789)</u>	<u>27,499</u>	<u>(38,288)</u>
Adjusted net interest income	<u>\$ 14,474</u>	<u>\$ 44,447</u>	<u>\$ (29,973)</u>	<u>\$ 35,431</u>	<u>\$ 27,567</u>	<u>\$ 7,864</u>

⁽¹⁾The changes for each category of interest income and interest expense represent changes in either average balances (volume) or average rates for both interest-earning assets and interest-bearing liabilities. We allocate the amount attributable to the combined impact of volume and rate to the rate variance.

⁽²⁾For the net periodic derivative cash settlements interest amount, the variance due to average volume represents the change in the net periodic derivative cash settlements interest expense amount resulting from the change in the average notional amount of derivative contracts outstanding. The variance due to average rate represents the change in the net periodic derivative cash settlements amount resulting from the net difference between the average rate paid and the average rate received for interest rate swaps during the period.

⁽³⁾See “Non-GAAP Financial Measures” for additional information on our adjusted non-GAAP financial measures.

Reported Net Interest Income

Reported net interest income of \$315 million for fiscal year 2023 decreased \$120 million, or 28%, from fiscal year 2022, driven by a decrease in the net interest yield of 48 basis points, or 33%, to 0.98%, partially offset by an increase in average interest-earning assets of \$2,366 million, or 8%.

- *Average Interest-Earning Assets:* The increase in average interest-earning assets of 8% during fiscal year 2023 was primarily attributable to growth in average total loans of \$2,345 million, or 8%, from fiscal year 2022, driven by an increase in average long-term fixed-rate loans of \$1,640 million and an increase in average line of credit loans of \$637 million, as members continued to advance loans to fund capital expenditures and for working capital.
- *Net Interest Yield:* The decrease in the net interest yield of 48 basis points, or 33%, was primarily attributable to the combined impact of an increase in our average cost of borrowings of 91 basis points to 3.44%, which was partially offset by an increase in the average yield on interest-earning assets of 37 basis points to 4.19% and an increase in the benefit from non-interest-bearing funding of 6 basis point to 0.23%. Our average yield on interest-earning assets and average cost of borrowings rose mainly due to the sustained increase in the federal funds rate, which increased 425 basis points since May 31, 2022. The increase in average yields on line of credit and variable-rate loans was the primary driver for the increase in the average yield on interest-earning assets. Meanwhile, our average cost of borrowings increased due to higher interest rates on our short-term and variable-rate borrowings.

Adjusted Net Interest Income

Adjusted net interest income of \$349 million for fiscal year 2023 increased \$14 million, or 4%, from fiscal year 2022, driven by an increase in average interest-earning assets of \$2,366 million, or 8%, partially offset by a decrease in the adjusted net interest yield of 4 basis points, or 4%, to 1.08%.

- *Average Interest-Earning Assets:* The increase in average interest-earning assets of 8% was driven by the growth in average total loans of \$2,345 million, or 8%, from fiscal year 2022, primarily attributable to an increase in average long-term fixed-rate and line of credit loans as discussed above.
- *Adjusted Net Interest Yield:* The decrease in the adjusted net interest yield of 4 basis points, or 4%, reflected the combined impact of an increase in our adjusted average cost of borrowings of 44 basis points to 3.33%, partially offset by an increase in the average yield on interest-earning assets of 37 basis points to 4.19% and an increase in the benefit from non-interest-bearing funding of 3 basis points to 0.22%. The increase in both average yield on interest-earning assets and adjusted average cost of borrowings was attributable to the continued high interest-rate environment during fiscal year 2023, as discussed above.

Derivative Cash Settlements

We include the net periodic derivative cash settlements interest income (expense) amounts on our interest rate swaps in the calculation of our adjusted average cost of borrowings, which, as a result, also impacts the calculation of adjusted net interest income and adjusted net interest yield. We recorded net periodic derivative cash settlements interest income of \$34 million for fiscal year 2023, compared with derivative cash settlements expense of \$101 million and \$116 million for fiscal years 2022 and 2021, respectively.

During fiscal year 2023, the floating-rate payments on our interest rate swaps were typically based on 3-month LIBOR. Following the cessation of LIBOR on June 30, 2023, SOFR will replace LIBOR for our interest rate swaps. Because our derivative portfolio consists of a higher proportion of pay-fixed swaps than receive-fixed swaps, the net periodic derivative cash settlements interest income (expense) amounts generally change based on changes in the floating interest amount received each period. When the 3-month LIBOR rate increases during the period, the received floating interest amounts on our pay-fixed swaps increase and, conversely, when the 3-month LIBOR swap rate decreases, the received floating interest amounts on our pay-fixed swaps decrease. The 3-month LIBOR rate increased during fiscal year 2023, resulting in an increase in received floating interest amounts and contributing to a net periodic derivative cash settlements interest income in the current fiscal year. In contrast, the 3-month LIBOR rate increase was more modest during fiscal year 2022, resulting

in a lower increase in received floating interest amounts and contributing to a modest reduction in net periodic derivative cash settlements interest expense amounts in the prior fiscal year.

See “Non-GAAP Financial Measures” for additional information on our non-GAAP financial measures, including a reconciliation of these measures to the most comparable U.S. GAAP financial measures.

Provision for Credit Losses

Our provision for credit losses each period is driven by changes in our measurement of lifetime expected credit losses for our loan portfolio recorded in the allowance for credit losses. Our allowance for credit losses and allowance coverage ratio were \$53 million and 0.16%, respectively, as of May 31, 2023. In comparison, our allowance for credit losses and allowance coverage ratio were \$68 million and 0.22%, respectively, as of May 31, 2022.

We recorded a provision for credit losses of \$1 million for fiscal year 2023. In contrast, we recorded a benefit for credit losses of \$18 million for fiscal year 2022. The current fiscal year provision stemmed primarily from an increase in the asset-specific allowance for loans to Brazos, Brazos Sandy Creek and for a nonperforming CFC power supply loan, attributable to a reduction and timing change in the expected payments on this loan. The benefit for credit losses for fiscal year 2022 was primarily driven by a decrease in the collective allowance due to an improvement in Rayburn’s credit risk profile and a significant reduction in loans outstanding to Rayburn.

We discuss our methodology for estimating the allowance for credit losses in “Note 1—Summary of Significant Accounting Policies—Allowance for Credit Losses—Current Methodology.” We also provide additional information on our allowance for credit losses below under section “Credit Risk—Allowance for Credit Losses” and “Note 5—Allowance for Credit Losses” in this Report.

Non-Interest Income

Non-interest income consists of fee and other income, gains and losses on derivatives not accounted for in hedge accounting relationships, and gains and losses on equity and debt investment securities, which consists of both unrealized and realized gains and losses.

Table 4 presents the components of non-interest income (loss) recorded in our consolidated statements of operations for fiscal years 2023, 2022 and 2021.

Table 4: Non-Interest Income

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Non-interest income components:			
Fee and other income	\$ 18,134	\$ 17,193	\$ 18,929
Derivative gains	285,844	456,482	506,301
Investment securities losses	(4,974)	(30,179)	1,495
Total non-interest income	<u>\$ 299,004</u>	<u>\$ 443,496</u>	<u>\$ 526,725</u>

The significant variance in non-interest income between fiscal years was primarily attributable to changes in the derivative gains recognized in our consolidated statements of operations. In addition, we experienced a decrease in the losses recorded on our debt and equity investment securities of \$25 million for the current fiscal year compared with the prior fiscal year. We expect period-to-period market fluctuations in the fair value of our equity and debt investment securities, which we report together with realized gains and losses from the sale of investment securities on our consolidated statements of operations.

Derivative Gains (Losses)

Our derivative instruments are an integral part of our interest rate risk-management strategy. Our principal purpose in using derivatives is to manage our aggregate interest rate risk profile within prescribed risk parameters. The derivative instruments

we use primarily include interest rate swaps, which we typically hold to maturity. In addition, we may use Treasury locks to manage the interest rate risk associated with future debt issuance or debt that is scheduled to reprice in the future. The primary factors affecting the fair value of our derivatives and derivative gains (losses) recorded in our results of operations include changes in interest rates, the shape of the swap curve and the composition of our derivative portfolio. We generally do not designate our interest rate swaps, which currently account for all our derivatives, for hedge accounting. Accordingly, changes in the fair value of interest rate swaps are reported in our consolidated statements of operations under derivative gains (losses). However, if we execute a Treasury lock, we typically designate the Treasury lock as a cash flow hedge.

We currently use two types of interest rate swap agreements: (i) we pay a fixed rate of interest and receive a variable rate of interest (“pay-fixed swaps”), and (ii) we pay a variable rate of interest and receive a fixed rate of interest (“receive-fixed swaps”). The interest amounts are based on a specified notional balance, which is used for calculation purposes only. The benchmark variable rate for the substantial majority of the floating-rate payments under our swap agreements is 3-month LIBOR. As interest rates decline, pay-fixed swaps generally decrease in value and result in the recognition of derivative losses, as the amount of interest we pay remains fixed, while the amount of interest we receive declines. In contrast, as interest rates rise, pay-fixed swaps generally increase in value and result in the recognition of derivative gains, as the amount of interest we pay remains fixed, but the amount we receive increases. With a receive-fixed swap, the opposite results occur as interest rates decline or rise. Our derivative portfolio consists of a higher proportion of pay-fixed swaps than receive-fixed swaps; therefore, we generally record derivative losses when interest rates decline and derivative gains when interest rates rise. Because our pay-fixed and receive-fixed swaps are referenced to different maturity terms along the swap curve, different changes in the swap curve—parallel, flattening, inversion or steepening—will also impact the fair value of our derivatives.

During fiscal year 2023, we executed three Treasury lock agreements with a total aggregate notional amount of \$400 million to hedge interest rate risk by locking in the underlying U.S. Treasury interest rate component of interest expense payments on anticipated debt issuances. The Treasury locks were designated and qualified as cash flow hedges. We terminated these Treasury locks in February 2023 and recorded a net settlement gain of \$7 million in AOCI, which will be reclassified into interest expense over the term that the hedged debt transaction affects earnings. We did not have any derivatives designated as accounting hedges as of May 31, 2023 or May 31, 2022.

Table 5 presents the components of net derivative gains (losses) recorded in our consolidated statements of operations for fiscal years 2023, 2022 and 2021. Derivative cash settlements interest income (expense) represents the net periodic contractual interest amount for our interest rate swaps during the reporting period. Derivative forward value gains (losses) represent the change in fair value of our interest rate swaps during the applicable reporting period due to changes in expected future interest rates over the remaining life of our derivative contracts.

Table 5: Derivative Gains (Losses)

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Derivative gains attributable to:			
Derivative cash settlements interest income (expense)	\$ 33,577	\$ (101,385)	\$ (115,645)
Derivative forward value gains	252,267	557,867	621,946
Derivative gains	<u>\$ 285,844</u>	<u>\$ 456,482</u>	<u>\$ 506,301</u>

We recorded derivative gains of \$286 million for fiscal year 2023, attributable to increases in interest rates across the entire swap curve during the period, with a more pronounced increase in short-term swap rates, namely the 3-month LIBOR rate. In contrast, we recorded derivative gains of \$456 million for fiscal year 2022, attributable to increases in interest rates across the entire swap curve during the period, with a more pronounced increase in medium- and long-term swap rates, namely the two-year, five-year to 10-year swap rates.

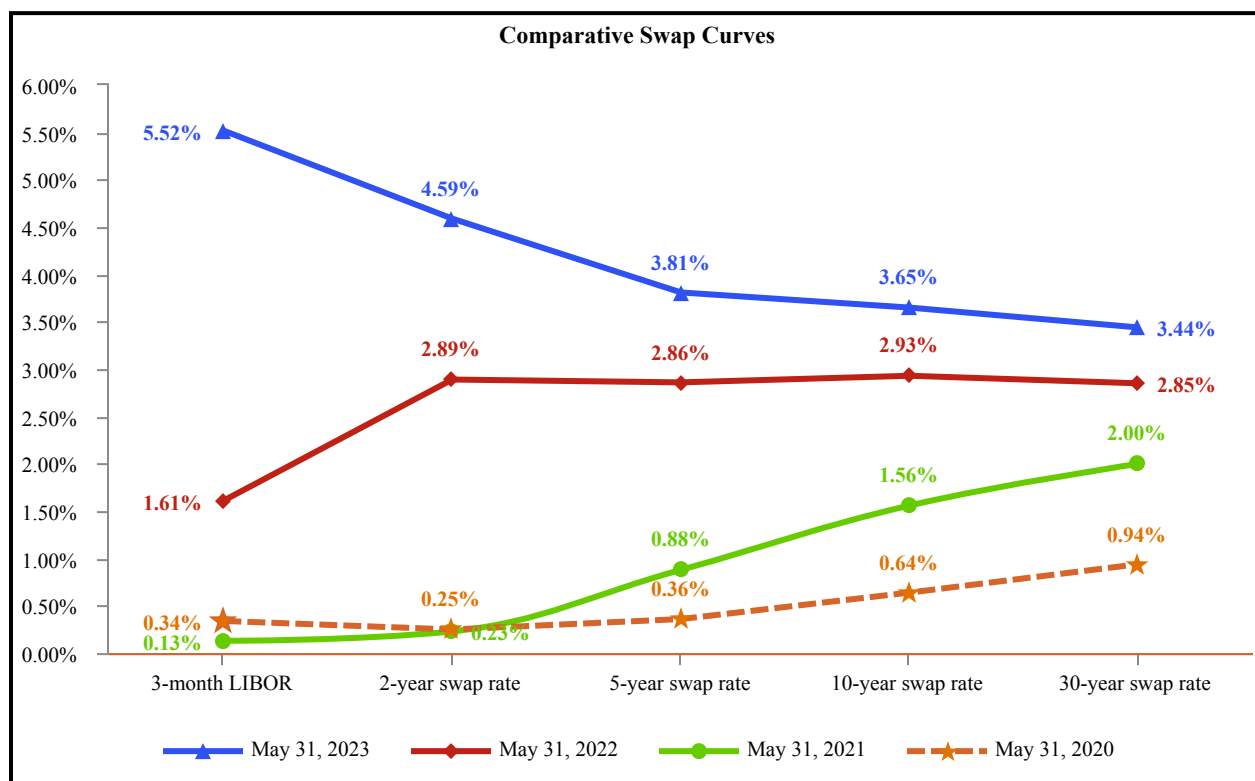
Our derivatives portfolio consisted of interest rate swaps with a total notional amount of \$7,816 million and \$8,062 million as of May 31, 2023 and 2022, respectively. As discussed above, our derivative portfolio consists of a higher proportion of longer-dated pay-fixed swaps than receive-fixed swaps, with pay-fixed swaps accounting for approximately 78% and 75% of the outstanding notional amount of our derivative portfolio as of May 31, 2023 and 2022, respectively. Therefore, increases and decreases in medium- and longer-term swap rates generally have a more pronounced corresponding impact on

the change in the net fair value of our swap portfolio. The average remaining maturity of our pay-fixed and receive-fixed swaps was 18 years and two years, respectively, as of May 31, 2023 and 19 years and three years, respectively, as of May 31, 2022. We present comparative swap curves, which depict the relationship between swap rates at varying maturities, for our reported periods in Table 6 below.

Comparative Swap Curves

Table 6 below provides comparative swap curves as of May 31, 2023, 2022, 2021 and 2020.

Table 6: Comparative Swap Curves



Benchmark rates obtained from Bloomberg.

See “Note 1—Summary of Significant Accounting Policies—Derivative Instruments” and “Note 10—Derivative Instruments and Hedging Activities” for additional information on our derivative instruments. Also refer to “Note 14—Fair Value Measurement” for information on how we measure the fair value of our derivative instruments.

Non-Interest Expense

Non-interest expense consists of salaries and employee benefit expense, general and administrative expenses, gains and losses on the early extinguishment of debt and other miscellaneous expenses.

Table 7 presents the components of non-interest expense recorded in our consolidated statements of operations in fiscal years 2023, 2022 and 2021.

Table 7: Non-Interest Expense

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Non-interest expense components:			
Salaries and employee benefits.....	\$ (59,011)	\$ (51,863)	\$ (55,258)
Other general and administrative expenses	(50,620)	(43,323)	(39,447)
Operating expenses	(109,631)	(95,186)	(94,705)
Losses on early extinguishment of debt.....	(117)	(754)	(1,456)
Other non-interest expense	(1,487)	(1,552)	(1,619)
Total non-interest expense.....	\$ (111,235)	\$ (97,492)	\$ (97,780)

Non-interest expense of \$111 million for fiscal year 2023, increased \$14 million, or 14%, from fiscal year 2022, primarily attributable to an increase in operating expenses, driven by higher expenses recorded for salaries, information technology, business travel and in-person corporate meetings and events.

Net Income (Loss) Attributable to Noncontrolling Interests

Net income (loss) attributable to noncontrolling interests represents 100% of the results of operations of NCSC and RTFC, as the members of NCSC and RTFC own or control 100% of the interest in their respective companies. The fluctuations in net income (loss) attributable to noncontrolling interests are primarily due to changes in the fair value of NCSC’s derivative instruments recognized in NCSC’s earnings.

We recorded a net income attributable to noncontrolling interests of less than \$1 million for fiscal year 2023. In comparison, we recorded a net income attributable to noncontrolling interests of \$3 million and \$2 million for fiscal years 2022 and 2021, respectively.

CONSOLIDATED BALANCE SHEET ANALYSIS

Total assets increased \$2,761 million, or 9%, in fiscal year 2023 to \$34,012 million as of May 31, 2023, primarily due to growth in our loan portfolio. We experienced an increase in total liabilities of \$2,313 million, or 8%, to \$31,423 million as of May 31, 2023, largely due to issuances of debt to fund the growth in our loan portfolio. Total equity increased \$447 million to \$2,589 million as of May 31, 2023, attributable to our reported net income of \$502 million for the current fiscal year, which was partially offset by the CFC Board of Directors’ authorized patronage capital retirement in July 2022 of \$59 million.

Below is a discussion of changes in the major components of our assets and liabilities during fiscal year 2023. Period-end balance sheet amounts may vary from average balance sheet amounts due to liquidity and balance sheet management activities that are intended to manage our liquidity requirements and market risk exposure in accordance with our risk appetite framework.

Loan Portfolio

We segregate our loan portfolio into segments, by legal entity, based on the borrower member class, which consists of CFC distribution, CFC power supply, CFC statewide and associate, NCSC and RTFC. We offer both long-term and line of credit loans to our borrowers. Under our long-term loan facilities, a borrower may select a fixed interest rate or a variable interest rate at the time of each loan advance. Line of credit loans are revolving loan facilities and generally have a variable interest rate. We describe and provide additional information on our member classes under “Item 1. Business—Members” and information about our loan programs and loan product types under “Item 1. Business—Loan and Guarantee Programs” in this Report.

Loans Outstanding

Table 8 presents loans outstanding by legal entity, member class and loan product type as of May 31, 2023 and 2022.

Table 8: Loans—Outstanding Amount by Member Class and Loan Type

(Dollars in thousands)	May 31,				Change
	2023		2022		
Member class:	Amount	% of Total	Amount	% of Total	
CFC:					
Distribution	\$ 25,437,077	78 %	\$ 23,844,242	79 %	\$ 1,592,835
Power supply	5,437,242	17	4,901,770	17	535,472
Statewide and associate	200,368	1	126,863	—	73,505
CFC	31,074,687	96	28,872,875	96	2,201,812
NCSC	956,874	3	710,878	2	245,996
RTFC	487,788	1	467,601	2	20,187
Total loans outstanding ⁽¹⁾	32,519,349	100 %	30,051,354	100 %	2,467,995
Deferred loan origination costs—CFC ⁽²⁾ ..	12,737	—	12,032	—	705
Loans to members	<u>\$ 32,532,086</u>	<u>100 %</u>	<u>\$ 30,063,386</u>	<u>100 %</u>	<u>\$ 2,468,700</u>
Loan type:					
Long-term loans:					
Fixed-rate	\$ 28,371,358	87 %	\$ 26,952,372	90 %	\$ 1,418,986
Variable-rate	1,024,653	3	820,201	2	204,452
Total long-term loans	29,396,011	90	27,772,573	92	1,623,438
Line of credit loans	3,123,338	10	2,278,781	8	844,557
Total loans outstanding ⁽¹⁾	32,519,349	100 %	30,051,354	100 %	2,467,995
Deferred loan origination costs—CFC ⁽²⁾ ..	12,737	—	12,032	—	705
Loans to members	<u>\$ 32,532,086</u>	<u>100 %</u>	<u>\$ 30,063,386</u>	<u>100 %</u>	<u>\$ 2,468,700</u>

⁽¹⁾ Represents the unpaid principal balance, net of discounts, charge-offs and recoveries, of loans as of the end of each period.

⁽²⁾ Deferred loan origination costs are recorded on the books of CFC.

Loans to members totaled \$32,532 million as of May 31, 2023, an increase of \$2,469 million, or 8%, from May 31, 2022, reflecting net increases in long-term and line of credit loans of \$1,623 million and \$845 million, respectively. The increase in line of credit loans was primarily attributable to funding provided for higher operating costs that our members experienced, bridge loans due to delays in RUS financing and broadband bridge loan financing. We experienced increases in CFC distribution loans, CFC power supply loans, CFC statewide and associate loans, NCSC loans and RTFC loans of \$1,593 million, \$535 million, \$74 million, \$246 million and \$20 million, respectively.

Long-term loan advances totaled \$3,297 million during fiscal year 2023, of which approximately 95% was provided to members for capital expenditures and approximately 2% was provided for the refinancing of loans made by other lenders. In comparison, long-term loan advances totaled \$3,386 million during fiscal year 2022, of which approximately 80% was provided to members for capital expenditures and 18% was provided to members for other expenses, primarily to fund operating expenses attributable to the elevated power cost obligations incurred during the February 2021 polar vortex. Of the \$3,297 million total long-term loans advanced during fiscal year 2023, \$2,849 million were fixed-rate loan advances with a weighted average fixed-rate term of 18 years.

We provide information on the credit performance and risk profile of our loan portfolio below under the section “Credit Risk—Loan Portfolio Credit Risk” in this Report. Also refer to “Item 1. Business—Loan and Guarantee Programs” and “Note 4—Loans” in this Report for additional information on our loans to members.”

Debt

We utilize both short-term borrowings and long-term debt as part of our funding strategy and asset/liability interest rate risk management. We seek to maintain diversified funding sources, including our members, affiliates, the capital markets and other funding sources, across products, programs and markets to manage funding concentrations and reduce our liquidity or debt rollover risk. Our funding sources include a variety of secured and unsecured debt securities in a wide range of maturities to our members, affiliates, the capital markets and other funding sources.

Debt Product Types

We offer various short- and long-term unsecured debt securities to our members and affiliates, including commercial paper, select notes, daily liquidity fund notes, medium-term notes and subordinated certificates. We also issue commercial paper, medium-term notes and collateral trust bonds in the capital markets. Additionally, we have access to funds under borrowing arrangements with banks, other non-capital market and U.S. government agencies. Table 9 displays our primary funding sources and their selected key attributes.

Table 9: Debt—Debt Product Types

Debt Product Type	Maturity Range	Market	Secured/ Unsecured
Short-term funding programs:			
Commercial paper	1 to 270 days	Capital markets, members and affiliates	Unsecured
Select notes	30 to 270 days	Members and affiliates	Unsecured
Daily liquidity fund notes	Demand note	Members and affiliates	Unsecured
Securities sold under repurchase agreements	1 to 90 days	Capital markets	Secured
Other funding programs:			
Medium-term notes	9 months to 30 years	Capital markets, members and affiliates	Unsecured
Collateral trust bonds ⁽¹⁾	Up to 30 years	Capital markets	Secured
Guaranteed Underwriter Program notes payable ⁽²⁾	Up to 30 years	U.S. government	Secured
Farmer Mac notes payable ⁽³⁾	Up to 30 years	Other non-capital market	Secured
Other notes payable ⁽⁴⁾	Up to 3 years	Other non-capital market	Both
Subordinated deferrable debt ⁽⁵⁾	Up to 45 years	Capital markets	Unsecured
Members' subordinated certificates ⁽⁶⁾	Up to 100 years	Members	Unsecured
Revolving credit agreements	Up to 5 years	Bank institutions	Unsecured

⁽¹⁾ Collateral trust bonds are secured by the pledge of permitted investments and eligible mortgage notes from distribution system borrowers in an amount at least equal to the outstanding principal amount of collateral trust bonds.

⁽²⁾ Represents notes payable under the Guaranteed Underwriter Program, which supports the Rural Economic Development Loan and Grant program. The Federal Financing Bank provides the financing for these notes, and RUS provides a guarantee of repayment. We are required to pledge eligible mortgage notes from distribution and power supply system borrowers in an amount at least equal to the outstanding principal amount of the notes payable.

⁽³⁾ We are required to pledge eligible mortgage notes from distribution and power supply system borrowers in an amount at least equal to the outstanding principal amount under the note purchase agreement with Farmer Mac.

⁽⁴⁾ Other notes payable consist of unsecured and secured Clean Renewable Energy Bonds. We are required to pledge eligible mortgage notes from distribution and power supply system borrowers in an amount at least equal to the outstanding principal amount under the Clean Renewable Energy Bonds Series 2009A note purchase agreement.

⁽⁵⁾ Subordinated deferrable debt is subordinate and junior to senior debt and debt obligations we guarantee, but senior to subordinated certificates. We have the right at any time, and from time to time, during the term of the subordinated deferrable debt to suspend interest payments for up to a maximum consecutive interest period. To date, we have not exercised our option to suspend interest payments. We also have the right to call the subordinated deferrable debt, in whole or in part, at par, either at certain intervals or any time after five or 10 years. The specific terms are detailed in each respective subordinated deferrable debt's prospectus supplement.

⁽⁶⁾ Members' subordinated certificates consist of membership subordinated certificates, loan and guarantee certificates and member capital securities, and are subordinated and junior to senior debt, subordinated debt and debt obligations we guarantee. Membership subordinated certificates generally mature 100 years subsequent to issuance. Loan and guarantee subordinated certificates have the same maturity as the related long-term loan. Some certificates also may amortize annually based on the outstanding loan balance. Member capital securities mature 30 years subsequent to issuance. Member capital securities are callable at par beginning either five or 10 years subsequent to the issuance and anytime thereafter.

Debt Outstanding

Table 10 displays the composition, by product type, of our outstanding debt and the weighted average interest rate as of May 31, 2023 and 2022. Table 10 also displays the composition of our debt based on several additional selected attributes.

Table 10: Debt—Total Debt Outstanding and Weighted-Average Interest Rates

(Dollars in thousands)	May 31,				
	2023		2022		Change
	Outstanding Amount	Weighted-Average Interest Rate	Outstanding Amount	Weighted-Average Interest Rate	
Debt product type:					
Commercial Paper:					
Members, at par	\$ 1,017,431	4.76 %	\$ 1,358,069	0.92 %	\$ (340,638)
Dealer, net of discounts	1,293,167	5.32	1,024,813	0.96	268,354
Total commercial paper	<u>2,310,598</u>	<u>5.07</u>	<u>2,382,882</u>	<u>0.94</u>	<u>(72,284)</u>
Select notes to members	1,630,799	4.96	1,753,441	1.11	(122,642)
Daily liquidity fund notes to members	238,329	4.35	427,790	0.80	(189,461)
Medium-term notes:					
Members, at par	731,809	4.31	667,451	1.43	64,358
Dealer, net of discounts	6,131,608	3.52	5,241,687	2.20	889,921
Total medium-term notes	<u>6,863,417</u>	<u>3.60</u>	<u>5,909,138</u>	<u>2.11</u>	<u>954,279</u>
Collateral trust bonds	7,577,973	3.46	6,848,490	3.17	729,483
Guaranteed Underwriter Program notes payable	6,720,643	3.09	6,105,473	2.69	615,170
Farmer Mac notes payable	3,149,898	3.92	3,094,679	2.33	55,219
Other notes payable	1,166	2.91	4,714	1.80	(3,548)
Subordinated deferrable debt	1,283,436	6.64	986,518	5.11	296,918
Members' subordinated certificates:					
Membership subordinated certificates	628,614	4.94	628,603	4.95	11
Loan and guarantee subordinated certificates	348,349	2.91	365,388	2.88	(17,039)
Member capital securities	246,163	5.01	240,170	5.00	5,993
Total members' subordinated certificates	<u>1,223,126</u>	<u>4.38</u>	<u>1,234,161</u>	<u>4.35</u>	<u>(11,035)</u>
Total debt outstanding	<u>\$ 30,999,385</u>	<u>3.83 %</u>	<u>\$ 28,747,286</u>	<u>2.54 %</u>	<u>\$ 2,252,099</u>
Security type:					
Secured debt	56 %		56 %		
Unsecured debt	44		44		
Total	<u>100 %</u>		<u>100 %</u>		
Funding source:					
Members	16 %		19 %		
Other non-capital market:					
Guaranteed Underwriter Program notes payable	22		21		
Farmer Mac notes payable	10		11		
Total other non-capital market	<u>32</u>		<u>32</u>		
Capital markets	52		49		
Total	<u>100 %</u>		<u>100 %</u>		
Interest rate type:					
Fixed-rate debt	80 %		77 %		
Variable-rate debt	20		23		
Total	<u>100 %</u>		<u>100 %</u>		
Interest rate type including swaps impact:					
Fixed-rate debt ⁽¹⁾	94 %		91 %		
Variable-rate debt ⁽²⁾	6		9		
Total	<u>100 %</u>		<u>100 %</u>		
Maturity classification:⁽³⁾					
Short-term borrowings	15 %		17 %		
Long-term and subordinated debt ⁽⁴⁾	85		83		
Total	<u>100 %</u>		<u>100 %</u>		

- (1) Includes variable-rate debt that has been swapped to a fixed rate, net of any fixed-rate debt that has been swapped to a variable rate.
- (2) Includes fixed-rate debt that has been swapped to a variable rate, net of any variable-rate debt that has been swapped to a fixed rate. Also includes commercial paper notes, which generally have maturities of less than 90 days. The interest rate on commercial paper notes does not change once the note has been issued; however, the interest rate for new commercial paper issuances changes daily.
- (3) Borrowings with an original contractual maturity of one year or less are classified as short-term borrowings. Borrowings with an original contractual maturity of greater than one year are classified as long-term debt.
- (4) Consists of long-term debt, subordinated deferrable debt and total members' subordinated debt reported on our consolidated balance sheets. Maturity classification is based on the original contractual maturity as of the date of issuance of the debt.

We issue debt primarily to fund growth in our loan portfolio. As such, our debt outstanding generally increases and decreases in response to member loan demand. Total debt outstanding totaling \$30,999 million as of May 31, 2023 increased by \$2,252 million, or 8%, from May 31, 2022, due to borrowings to fund the increase in loans to members. Outstanding dealer commercial paper of \$1,293 million as of May 31, 2023 was within our quarter-end target range of \$1,000 million to \$1,500 million. We provide additional information on our financing activities during fiscal year 2023 in the below section "Liquidity Risk" of this Report.

Member Investments

Debt securities issued to our members represent an important, stable source of funding. Table 11 displays member debt outstanding, by product type, as of May 31, 2023 and 2022.

Table 11: Debt—Member Investments

(Dollars in thousands)	May 31,				Change
	2023		2022		
	Amount	% of Total ⁽¹⁾	Amount	% of Total ⁽¹⁾	
Member investment product type:					
Commercial paper.....	\$ 1,017,431	44 %	\$ 1,358,069	57 %	\$ (340,638)
Select notes.....	1,630,799	100	1,753,441	100	(122,642)
Daily liquidity fund notes.....	238,329	100	427,790	100	(189,461)
Medium-term notes.....	731,809	11	667,451	11	64,358
Members' subordinated certificates.....	1,223,126	100	1,234,161	100	(11,035)
Total member investments.....	<u>\$ 4,841,494</u>		<u>\$ 5,440,912</u>		<u>\$ (599,418)</u>
Percentage of total debt outstanding.....	16 %		19 %		

⁽¹⁾ Represents outstanding debt attributable to members for each debt product type as a percentage of the total outstanding debt for each debt product type.

Member investments accounted for 16% and 19% of total debt outstanding as of May 31, 2023 and 2022, respectively. Member investments totaling \$4,841 million as of May 31, 2023 decreased \$599 million from May 31, 2022, primarily attributable to the decline in short-term member investments as our members had less excess cash on hand due to their continued capital expenditure needs. Over the last three fiscal years, our member investments have averaged \$5,162 million, calculated based on outstanding member investments as of the end of each fiscal quarter during the period.

Short-Term Borrowings

Short-term borrowings consist of borrowings with an original contractual maturity of one year or less and do not include the current portion of long-term debt. Short-term borrowings decreased to \$4,546 million as of May 31, 2023, from \$4,981 million as of May 31, 2022, primarily driven by a decrease in short-term member investments, partially offset by an increase in outstanding dealer commercial paper. Short-term borrowings accounted for 15% and 17% of total debt outstanding as of May 31, 2023 and 2022, respectively. See "Liquidity Risk" below and "Note 6—Short-Term Borrowings" for information on the composition of our short-term borrowings.

Long-Term and Subordinated Debt

Long-term debt, defined as debt with an original contractual maturity term of greater than one year, primarily consists of medium-term notes, collateral trust bonds, notes payable under the Guaranteed Underwriter Program and notes payable under the Farmer Mac revolving note purchase agreement. Subordinated debt consists of subordinated deferrable debt and members' subordinated certificates. Our subordinated deferrable debt and members' subordinated certificates have original contractual maturity terms of greater than one year.

Long-term and subordinated debt increased to \$26,453 million as of May 31, 2023, from \$23,766 million as of May 31, 2022, primarily due to a net increase of \$889 million in dealer medium-term notes, \$729 million in collateral trust bonds, \$615 million in notes payable under the Guaranteed Underwriter Program and \$297 million in subordinated deferrable debt to fund loan portfolio growth during fiscal year 2023. Long-term and subordinated debt accounted for 85% and 83% of total debt outstanding as of May 31, 2023 and 2022, respectively. We provide additional information on our long-term debt below under the section "Liquidity Risk" and "Note 7—Long-Term Debt" and "Note 8—Subordinated Deferrable Debt" in this Report.

Equity

Table 12 presents the components of total CFC equity and total equity as of May 31, 2023 and 2022.

Table 12: Equity

(Dollars in thousands)	May 31,		Change
	2023	2022	
Equity components:			
Membership fees and educational fund:			
Membership fees	\$ 969	\$ 970	\$ (1)
Educational fund	2,565	2,417	148
Total membership fees and educational fund	3,534	3,387	147
Patronage capital allocated	1,006,115	954,988	51,127
Members' capital reserve	1,202,152	1,062,286	139,866
Total allocated equity	2,211,801	2,020,661	191,140
Unallocated net income (loss):			
Prior fiscal year-end cumulative derivative forward value gains (losses) ⁽¹⁾	92,363	(461,162)	553,525
Year-to-date derivative forward value gains ⁽¹⁾	250,261	553,525	(303,264)
Period-end cumulative derivative forward value gains ⁽¹⁾	342,624	92,363	250,261
Other unallocated net loss	(709)	(709)	—
Unallocated net income	341,915	91,654	250,261
CFC retained equity	2,553,716	2,112,315	441,401
Accumulated other comprehensive income	8,343	2,258	6,085
Total CFC equity	2,562,059	2,114,573	447,486
Noncontrolling interests	27,190	27,396	(206)
Total equity	\$ 2,589,249	\$ 2,141,969	\$ 447,280

⁽¹⁾Represents derivative forward value gains (losses) for CFC only, as total CFC equity does not include the noncontrolling interests of the variable interest entities NCSC and RTFC, which we are required to consolidate. We present the consolidated total derivative forward value gains (losses) in Table 36 in the "Non-GAAP Financial Measures" section below. Also, see "Note 16—Business Segments" for the statements of operations for CFC.

The increase in total equity of \$447 million to \$2,589 million as of May 31, 2023 was attributable to our reported net income of \$502 million for fiscal year 2023, partially offset by the CFC Board of Directors' authorized patronage capital retirement in July 2022 of \$59 million.

Allocation and Retirement of Patronage Capital

We are subject to District of Columbia law governing cooperatives, under which CFC is required to make annual allocations of net earnings, if any, in accordance with the provisions of the District of Columbia statutes. District of Columbia cooperative law requires cooperatives to allocate net earnings to patrons, to a general reserve in an amount sufficient to maintain a balance of at least 50% of paid-up capital and to a cooperative educational fund, as well as permits additional allocations to board-approved reserves. District of Columbia cooperative law also requires that a cooperative's net earnings be allocated to all patrons in proportion to their individual patronage and each patron's allocation be distributed to the patron unless the patron agrees that the cooperative may retain its share as additional capital. Pursuant to these provisions, the CFC Board of Directors is required to make annual allocations of net earnings, if any. CFC's net earnings for determining allocations are based on non-GAAP adjusted net income, which excludes the impact of derivative forward value gains (losses). We provide a reconciliation of our adjusted net income to our reported net income and an explanation of the adjustments below in "Non-GAAP Financial Measures."

In May 2023, the CFC Board of Directors authorized the allocation of \$1 million of net earnings for fiscal year 2023 to the cooperative educational fund. In July 2023, the CFC Board of Directors authorized the allocation of fiscal year 2023 adjusted net income as follows: \$110 million to members in the form of patronage capital and \$140 million to the members' capital reserve. In July 2023, the CFC Board of Directors also authorized the retirement of patronage capital totaling \$72 million, of which \$55 million represented 50% of the patronage capital allocation for fiscal year 2023 and \$17 million represented the portion of the allocation from fiscal year 1998 net earnings that had been held for 25 years pursuant to the CFC Board of Directors' policy. We expect to return the authorized patronage capital retirement amount of \$72 million to members in cash in the second quarter of fiscal year 2024. The remaining portion of the patronage capital allocation for fiscal year 2023 will be retained by CFC for 25 years pursuant to the guidelines adopted by the CFC Board of Directors in June 2009.

In May 2022, the CFC Board of Directors authorized the allocation of \$1 million of net earnings for fiscal year 2022 to the cooperative educational fund. In July 2022 the CFC Board of Directors authorized the allocation of fiscal year 2022 adjusted net income as follows: \$89 million to members in the form of patronage capital and \$153 million to the members' capital reserve. In July 2022, the CFC Board of Directors also authorized the retirement of patronage capital totaling \$59 million, of which \$44 million represented 50% of the patronage capital allocation for fiscal year 2022 and \$15 million represented the portion of the allocation from fiscal year 1997 net earnings that had been held for 25 years pursuant to the CFC Board of Directors' policy. This amount was returned to members in cash in September 2022. The remaining portion of the patronage capital allocation for fiscal year 2022 will be retained by CFC for 25 years pursuant to the guidelines adopted by the CFC Board of Directors in June 2009.

The CFC Board of Directors is required to make annual allocations of adjusted net income, if any. CFC has made annual retirements of allocated net earnings in 43 of the last 44 fiscal years; however, future retirements of allocated amounts are determined based on CFC's financial condition. The CFC Board of Directors has the authority to change the current practice for allocating and retiring net earnings at any time, subject to applicable laws.

ENTERPRISE RISK MANAGEMENT

Overview

CFC has an Enterprise Risk Management ("ERM") framework that is designed to identify, assess, monitor and manage the risks we assume in conducting our activities to serve the financial needs of our members. We face a variety of risks that can significantly affect our financial performance, liquidity, reputation and ability to meet the expectations of our members, investors and other stakeholders. As a financial services company, the major categories of risk exposures inherent in our business activities include credit risk, liquidity risk, market risk and operational risk. These risk categories are summarized below.

- *Credit risk* is the risk that a borrower or other counterparty will be unable to meet its obligations in accordance with agreed-upon terms.

[Table of Contents](#)

- *Liquidity risk* is the risk that we will be unable to fund our operations and meet our contractual obligations or that we will be unable to fund new loans to borrowers at a reasonable cost and tenor in a timely manner.
- *Market risk* is the risk that changes in market variables, such as movements in interest rates, may adversely affect the match between the timing of the contractual maturities, repricing and prepayments of our financial assets and the related financial liabilities funding those assets.
- *Operational risk* is the risk of loss resulting from inadequate or failed internal controls, processes, systems, human error or external events, including natural disasters or public health emergencies, such as the COVID-19 pandemic. Operational risk also includes cybersecurity risk, compliance risk, fiduciary risk, reputational risk and litigation risk.

Effective risk management is critical to our overall operations and to achieving our primary objective of providing cost-based financial products to our rural electric members while maintaining the sound financial results required for investment-grade credit ratings on our rated debt instruments. Accordingly, we have a risk-management framework that is intended to govern the principal risks we face in conducting our business and the aggregate amount of risk we are willing to accept, referred to as risk tolerance as well as risk limits and related guidelines, in the context of CFC's mission and strategic objectives and initiatives.

Risk-Management Framework

Our ERM framework consists of a defined policy and process for managing key risks in alignment with CFC's mission and the CFC Board of Director's strategic objectives. The board of directors has responsibility for the oversight and strategic direction of the ERM framework and has adopted a comprehensive risk-management policy that describes the roles and responsibilities of the board and management within this framework for identifying and managing risks. In fulfilling its risk-management oversight duties, the board of directors receives periodic reports on business activities and risk-management activities from management. Throughout the year at its periodic meetings, the CFC Board of Directors reviews important trends and emerging developments across key risks determined by management. The board also establishes CFC's loan policies and has established a Loan Committee of the board comprising no fewer than 10 directors that reviews the performance of the loan portfolio in accordance with those policies. For additional information about the role of the CFC Board of Directors in risk governance and oversight, see "Item 10. Directors, Executive Officers and Corporate Governance."

The Enterprise Risk Group provides independent oversight and support in the establishment of CFC's ERM framework, and is responsible for establishing and maintaining internal controls to mitigate key risks. In addition, we have a number of management-level risk oversight committees across the organization and groups within the organization that have a defined set of authorities and responsibilities specific to one or more risk types, including the Corporate Credit Committee, Asset Liability Committee, Investment Management Committee, Information Technology Steering Committee and Disclosure Committee. The Chief Risk Officer provides reports to the board of directors at each regularly scheduled board meeting, and more frequently as requested by the board of directors, relating to, among other things, the ongoing progress of managing risk at CFC given the ERM framework; management's responses for the critical business risks identified during the risk assessment process and the status of any gaps or deficiencies; and CFC's risk profile and trends, as well as emerging risks and opportunities.

CREDIT RISK

Our loan portfolio, which represents the largest component of assets on our balance sheet, accounts for the substantial majority of our credit risk exposure. We also engage in certain nonlending activities that may give rise to counterparty credit risk, such as entering into derivative transactions to manage interest rate risk and purchasing investment securities.

Credit Risk Management

We manage credit risk related to our loan portfolio consistent with credit policies established by the CFC Board of Directors and through credit underwriting, approval and monitoring processes and practices adopted by management. Our board-established credit policies include guidelines regarding the types of credit products we offer, limits on credit we extend to

individual borrowers, approval authorities delegated to management, and use of syndications and loan sales. We maintain an internal risk rating system in which we assign a rating to each borrower and credit facility. We review and update the risk ratings at least annually. Assigned risk ratings inform our credit approval, borrower monitoring and portfolio review processes. Our Corporate Credit Committee approves individual credit actions within its own authority and, together with our Credit Risk Management group, establishes standards for credit underwriting, oversees credits deemed to be higher risk, reviews assigned risk ratings for accuracy, and monitors the overall credit quality and performance statistics of our loan portfolio.

Loan Portfolio Credit Risk

Our primary credit exposure is loans to rural electric cooperatives, which provide essential electric services to end-users, the majority of which are residential customers. We also have a limited portfolio of loans to not-for-profit and for-profit telecommunication companies. Loans outstanding to electric utility organizations totaled \$32,032 million and \$29,584 million as of May 31, 2023 and 2022, respectively, representing 99% and 98% of total loans outstanding as of each respective date. The remaining loans outstanding in our loan portfolio were to RTFC members, affiliates and associates in the telecommunications industry sector. The substantial majority of loans to our borrowers are long-term fixed-rate loans with terms of up to 35 years. Long-term fixed-rate loans accounted for 87% and 90% of total loans outstanding as of May 31, 2023 and 2022, respectively.

Because we lend primarily to our rural electric utility cooperative members, we have had a loan portfolio inherently subject to single-industry and single-obligor credit concentration risk since our inception in 1969. We historically, however, have experienced limited defaults and losses in our electric utility loan portfolio due to several factors. First, the majority of our electric cooperative borrowers operate in states where electric cooperatives are not subject to rate regulation. Thus, they are able to make rate adjustments to pass along increased costs to the end customer without first obtaining state regulatory approval, allowing them to cover operating costs and generate sufficient earnings and cash flows to service their debt obligations. Second, electric cooperatives face limited competition, as they tend to operate in exclusive territories not serviced by public investor-owned utilities. Third, electric cooperatives typically are consumer-owned, not-for-profit entities that provide an essential service to end-users, the majority of which are residential customers. As not-for-profit entities, rural electric cooperatives, unlike investor-owned utilities, generally are eligible to apply for assistance from the Federal Emergency Management Agency (“FEMA”) and states to help recover from major disasters or emergencies. Fourth, electric cooperatives tend to adhere to a conservative core business strategy model that has historically resulted in a relatively stable, resilient operating environment and overall strong financial performance and credit strength for the electric cooperative network. Finally, we generally lend to our members on a senior secured basis, which reduces the risk of loss in the event of a borrower default.

Below we provide information on the credit risk profile of our loan portfolio, including security provisions, credit concentration, credit quality indicators and our allowance for credit losses.

Security Provisions

Except when providing line of credit loans, we generally lend to our members on a senior secured basis. Long-term loans are generally secured on parity with other secured lenders (primarily RUS), if any, by all assets and revenue of the borrower with exceptions typical in utility mortgages. Line of credit loans are generally unsecured. In addition to the collateral pledged to secure our loans, distribution and power supply borrowers also are required to set rates charged to customers to achieve certain specified financial ratios. Table 13 presents, by legal entity and member class and by loan type, secured and unsecured loans in our loan portfolio as of May 31, 2023 and 2022. Of our total loans outstanding, 92% and 93% were secured as of May 31, 2023 and 2022, respectively.

Table 13: Loans—Loan Portfolio Security Profile

(Dollars in thousands)	May 31, 2023				
	Secured	% of Total	Unsecured	% of Total	Total
Member class:					
CFC:					
Distribution	\$ 23,736,624	93 %	\$ 1,700,453	7 %	\$ 25,437,077
Power supply	4,633,558	85	803,684	15	5,437,242
Statewide and associate	157,342	79	43,026	21	200,368
Total CFC	28,527,524	92	2,547,163	8	31,074,687
NCSC	925,925	97	30,949	3	956,874
RTFC	462,209	95	25,579	5	487,788
Total loans outstanding ⁽¹⁾	<u>\$ 29,915,658</u>	92	<u>\$ 2,603,691</u>	8	<u>\$ 32,519,349</u>
Loan type:					
Long-term loans:					
Fixed-rate	\$ 28,203,752	99 %	\$ 167,606	1 %	\$ 28,371,358
Variable-rate	1,022,841	100	1,812	—	1,024,653
Total long-term loans	29,226,593	99	169,418	1	29,396,011
Line of credit loans	689,065	22	2,434,273	78	3,123,338
Total loans outstanding ⁽¹⁾	<u>\$ 29,915,658</u>	92	<u>\$ 2,603,691</u>	8	<u>\$ 32,519,349</u>
May 31, 2022					
(Dollars in thousands)	Secured	% of Total	Unsecured	% of Total	Total
Member class:					
CFC:					
Distribution	\$ 22,405,486	94 %	\$ 1,438,756	6 %	\$ 23,844,242
Power supply	4,455,098	91	446,672	9	4,901,770
Statewide and associate	83,759	66	43,104	34	126,863
Total CFC	26,944,343	93	1,928,532	7	28,872,875
NCSC	689,887	97	20,991	3	710,878
RTFC	454,985	97	12,616	3	467,601
Total loans outstanding ⁽¹⁾	<u>\$ 28,089,215</u>	93	<u>\$ 1,962,139</u>	7	<u>\$ 30,051,354</u>
Loan type:					
Long-term loans:					
Fixed-rate	\$ 26,731,763	99 %	\$ 220,609	1 %	\$ 26,952,372
Variable-rate	817,866	100	2,335	—	820,201
Total long-term loans	27,549,629	99	222,944	1	27,772,573
Line of credit loans	539,586	24	1,739,195	76	2,278,781
Total loans outstanding ⁽¹⁾	<u>\$ 28,089,215</u>	93	<u>\$ 1,962,139</u>	7	<u>\$ 30,051,354</u>

⁽¹⁾Represents the unpaid principal balance, net of discounts, charge-offs and recoveries of loans as of the end of each period. Excludes unamortized deferred loan origination costs of \$13 million and \$12 million as of May 31, 2023 and 2022, respectively.

Credit Concentration

Concentrations of credit may exist when a lender has large credit exposures to single borrowers, large credit exposures to borrowers in the same industry sector or engaged in similar activities or large credit exposures to borrowers in a geographic

region that would cause the borrowers to be similarly impacted by economic or other conditions in the region. As discussed above under “Credit Risk—Loan Portfolio Credit Risk,” because we lend primarily to our rural electric utility cooperative members, our loan portfolio is inherently subject to single-industry and single-obligor credit concentration risk. Loans outstanding to electric utility organizations totaled \$32,032 million and \$29,584 million as of May 31, 2023 and 2022, respectively, and represented approximately 99% and 98% of our total loans outstanding as of each respective date. Our credit exposure is partially mitigated by long-term loans guaranteed by RUS, which totaled \$123 million and \$131 million as of May 31, 2023 and 2022, respectively.

Single-Obligor Concentration

Table 14 displays the outstanding loan exposure for our 20 largest borrowers, by legal entity and member class, as of May 31, 2023 and 2022. Our 20 largest borrowers consisted of 10 distribution systems and 10 power supply systems as of May 31, 2023. In comparison, our 20 largest borrowers consisted of 12 distribution systems and eight power supply systems as of May 31, 2022. The largest total exposure to a single borrower or controlled group represented 1% of total loans outstanding as of both May 31, 2023 and 2022.

Table 14: Loans—Loan Exposure to 20 Largest Borrowers

(Dollars in thousands)	May 31,			
	2023		2022	
	Amount	% of Total	Amount	% of Total
Member class:				
CFC:				
Distribution	\$3,600,193	11 %	\$3,929,160	13 %
Power supply	2,782,098	9	2,095,640	7
Total CFC	6,382,291	20	6,024,800	20
NCSC	205,321	—	195,001	1
Total loan exposure to 20 largest borrowers	6,587,612	20	6,219,801	21
Less: Loans covered under Farmer Mac standby purchase commitment	(266,754)	(1)	(316,367)	(1)
Net loan exposure to 20 largest borrowers	<u>\$6,320,858</u>	<u>19 %</u>	<u>\$5,903,434</u>	<u>20 %</u>

We entered into a long-term standby purchase commitment agreement with Farmer Mac during fiscal year 2016. Under this agreement, we may designate certain long-term loans to be covered under the commitment, subject to approval by Farmer Mac, and in the event any such loan later goes into payment default for at least 90 days, upon request by us, Farmer Mac must purchase such loan at par value. The aggregate unpaid principal balance of designated and Farmer Mac approved loans was \$436 million and \$493 million as of May 31, 2023 and 2022, respectively. Loan exposure to our 20 largest borrowers covered under the Farmer Mac agreement totaled \$267 million and \$316 million as of May 31, 2023 and 2022, respectively, which reduced our exposure to the 20 largest borrowers to 19% and 20% as of each respective date. No loans have been put to Farmer Mac for purchase pursuant to this agreement.

Geographic Concentration

Although our organizational structure and mission result in single-industry concentration, we serve a geographically diverse group of electric and telecommunications borrowers throughout the U.S. The consolidated number of borrowers with loans outstanding totaled 884 and 883 as of May 31, 2023 and 2022, respectively, located in 49 states and the District of Columbia. Of the 884 and 883 borrowers with loans outstanding as of May 31, 2023 and 2022, respectively, 52 and 49 were electric power supply borrowers as of each respective date. Electric power supply borrowers generally require significantly more capital than electric distribution and telecommunications borrowers.

Texas accounted for the largest number of borrowers with loans outstanding in any one state as of both May 31, 2023 and 2022, as well as the largest concentration of loan exposure in any one state. Table 15 presents the Texas-based number of borrowers and loans outstanding by legal entity and member class, as of May 31, 2023 and 2022.

Table 15: Loans—Loan Exposure to Texas-Based Borrowers

(Dollars in thousands)	May 31,					
	2023			2022		
	Number of Borrowers	Amount	% of Total	Number of Borrowers	Amount	% of Total
Member class:						
CFC:						
Distribution	57	\$ 4,319,937	13 %	57	\$ 3,984,887	13 %
Power supply	8	1,128,941	4	8	1,089,896	4
Statewide and associate	1	51,504	—	1	29,335	—
Total CFC	66	5,500,382	17	66	5,104,118	17
NCSC	1	16,667	—	1	378	—
RTFC	2	11,755	—	1	5,853	—
Total loan exposure to Texas-based borrowers	69	5,528,804	17	68	5,110,349	17
Less: Loans covered under Farmer Mac standby purchase commitment		(155,409)	—		(163,369)	(1)
Net loan exposure to Texas-based borrowers.		<u>\$ 5,373,395</u>	<u>17 %</u>		<u>\$ 4,946,980</u>	<u>16 %</u>

Table 16 provides a breakdown, by state or U.S. territory, of the total number of borrowers with loans outstanding as of May 31, 2023 and 2022 and the outstanding loan exposure to borrowers in each jurisdiction as a percentage of total loans outstanding of \$32,519 million and \$30,051 million as of May 31, 2023 and 2022, respectively.

Table 16: Loans—Loan Geographic Concentration

U.S. State/Territory	May 31,			
	2023		2022	
	Number of Borrowers	% of Total Loans Outstanding	Number of Borrowers	% of Total Loans Outstanding
Alabama	21	2.50 %	21	2.37 %
Alaska	16	3.40	16	3.29
Arizona	10	1.15	11	0.95
Arkansas	22	3.39	21	2.42
California	4	0.13	4	0.12
Colorado	27	5.22	27	5.53
Delaware	3	0.22	3	0.26
District of Columbia	1	0.06	1	0.10
Florida	19	3.96	19	3.65
Georgia	45	5.39	45	5.33
Hawaii	2	0.27	2	0.32
Idaho	10	0.34	10	0.41
Illinois	31	3.02	32	3.23
Indiana	40	3.84	40	3.67
Iowa	36	2.37	35	2.31
Kansas	28	3.43	28	3.78
Kentucky	23	2.84	23	2.47
Louisiana	8	1.96	8	2.49
Maine	3	0.07	3	0.07
Maryland	2	1.39	2	1.48
Massachusetts	1	0.19	1	0.20
Michigan	11	1.73	11	1.70
Minnesota	44	2.06	46	2.16
Mississippi	22	2.13	21	1.86
Missouri	43	5.58	44	5.65
Montana	21	0.76	23	0.80
Nebraska	9	0.08	9	0.10
Nevada	7	0.70	8	0.82
New Hampshire	2	0.38	2	0.36
New Jersey	2	0.07	2	0.07
New Mexico	11	0.16	12	0.17
New York	19	0.44	13	0.42
North Carolina	26	2.76	26	2.85
North Dakota	15	2.66	16	2.83
Ohio	27	2.00	27	2.10
Oklahoma	24	3.31	25	3.18
Oregon	18	1.52	19	1.24
Pennsylvania	15	1.74	15	1.75
Rhode Island	1	0.03	1	0.03
South Carolina	23	2.54	23	2.80
South Dakota	29	0.60	29	0.67
Tennessee	19	0.79	17	0.78
Texas	69	17.00	68	17.01
Utah	4	0.80	4	0.78
Vermont	4	0.15	5	0.16
Virginia	18	1.17	17	1.38
Washington	9	0.92	10	1.02
West Virginia	2	0.03	2	0.03
Wisconsin	26	1.84	24	1.79
Wyoming	12	0.91	12	1.04
Total	884	100.00 %	883	100.00 %

Credit Quality Indicators

Assessing the overall credit quality of our loan portfolio and measuring our credit risk is an ongoing process that involves tracking payment status, troubled debt restructurings, nonperforming loans, charge-offs, the internal risk ratings of our borrowers and other indicators of credit risk. We monitor and subject each borrower and loan facility in our loan portfolio to an individual risk assessment based on quantitative and qualitative factors. Payment status trends and internal risk ratings are indicators, among others, of the probability of borrower default and overall credit quality of our loan portfolio. We believe the overall credit quality of our loan portfolio remained strong as of May 31, 2023.

Troubled Debt Restructurings

We actively monitor problem loans and, from time to time, attempt to work with borrowers to manage such exposures through loan workouts or modifications that better align with the borrower’s current ability to pay. A loan restructuring or modification of terms is accounted for as a TDR if, for economic or legal reasons related to the borrower’s financial difficulties, a concession is granted to the borrower that we would not otherwise consider. TDR loans generally are initially classified as nonperforming and placed on nonaccrual status, although in many cases such loans were already classified as nonperforming prior to modification. These loans may be returned to performing status and the accrual of interest resumed if the borrower performs under the modified terms for an extended period of time, and we expect the borrower to continue to perform in accordance with the modified terms. In certain limited circumstances in which a TDR loan is current at the modification date, the loan may remain on accrual status at the time of modification. Although TDR loans may be returned to performing status if the borrower performs under the modified terms of the loan for an extended period of time, we evaluate TDR loans on an individual basis in measuring expected credit losses for these loans.

Table 17 presents the outstanding amount of modified loans accounted for as TDRs, by member class, and the performance status of these loans as of May 31, 2023 and 2022.

Table 17: Loans—Troubled Debt Restructured Loans

(Dollars in thousands)	May 31,					
	2023			2022		
	Number of Borrowers	Outstanding Amount ⁽¹⁾	% of Total Loans Outstanding	Number of Borrowers	Outstanding Amount ⁽¹⁾	% of Total Loans Outstanding
TDR loans:						
CFC—Distribution	1	\$ 4,638	0.02 %	1	\$ 5,092	0.02 %
CFC—Power Supply	1	22,875	0.07	—	—	—
RTFC	1	3,592	0.01	1	4,092	0.01
Total TDR loans	<u>3</u>	<u>\$ 31,105</u>	<u>0.10 %</u>	<u>2</u>	<u>\$ 9,184</u>	<u>0.03 %</u>
Performance status of TDR loans:						
Performing TDR loans	2	\$ 8,230	0.03 %	2	\$ 9,184	0.03 %
Nonperforming TDR loans	1	22,875	0.07	—	—	—
Total TDR loans	<u>3</u>	<u>\$ 31,105</u>	<u>0.10 %</u>	<u>2</u>	<u>\$ 9,184</u>	<u>0.03 %</u>

⁽¹⁾ Represents the unpaid principal balance net of charge-offs and recoveries as of the end of each period.

TDR loans totaled \$31 million as of May 31, 2023, an increase of \$22 million from May 31, 2022, primarily due to the classification of Brazos’ nonperforming loans to TDR loans during the third quarter of fiscal year 2023. The performing TDR loans outstanding have been performing in accordance with the terms of their respective restructured loan agreements for an extended period of time and were on accrual status as of May 31, 2023 and 2022, respectively.

We had nonperforming TDR loans outstanding to Brazos totaling \$23 million as of May 31, 2023, which were on non-accrual status as of May 31, 2023. Brazos, a CFC Texas-based electric power supply borrower, filed for bankruptcy in March 2021 due to its exposure to elevated wholesale electric power costs during the February 2021 polar vortex. On November 14, 2022, Brazos’ plan of reorganization was confirmed by the bankruptcy court and it became effective on

December 15, 2022. Due to Brazos experiencing financial difficulty and the principal loan concession provided to Brazos by the bankruptcy court as part of its approval of Brazos’ plan of reorganization, which was effective on December 15, 2022, the remaining Brazos loans outstanding were moved from nonperforming loans and classified as nonperforming TDR loans during the third quarter of fiscal year 2023. We did not have any TDR loans classified as nonperforming as of May 31, 2022. Prior to the Brazos loan restructuring, we have not had any loan modifications that were required to be accounted for as TDRs since fiscal year 2016. In June 2023, we received the remaining payment of Brazos’ loans outstanding of \$23 million in accordance with the provisions of Brazos’ plan of reorganization to repay its loans in full.

Nonperforming Loans

In addition to TDR loans that may be classified as nonperforming, we also may have nonperforming loans that have not been modified as a TDR. We classify such loans as nonperforming at the earlier of the date when we determine: (i) interest or principal payments on the loan is past due 90 days or more; (ii) as a result of court proceedings, the collection of interest or principal payments based on the original contractual terms is not expected; or (iii) the full and timely collection of interest or principal is otherwise uncertain. Once a loan is classified as nonperforming, we generally place the loan on nonaccrual status. Interest accrued but not collected at the date a loan is placed on nonaccrual status is reversed against earnings. Table 18 presents the outstanding balance of nonperforming loans, by member class, as of May 31, 2023 and 2022.

Table 18: Loans—Nonperforming Loans

(Dollars in thousands)	May 31,					
	2023			2022		
	Number of Borrowers	Outstanding Amount ⁽¹⁾	% of Total Loans Outstanding	Number of Borrowers	Outstanding Amount ⁽¹⁾	% of Total Loans Outstanding
Nonperforming loans:						
CFC—Power supply	2	\$ 89,334	0.27 %	3	\$ 227,790	0.76 %
Total nonperforming loans	<u>2</u>	<u>\$ 89,334</u>	<u>0.27 %</u>	<u>3</u>	<u>\$ 227,790</u>	<u>0.76 %</u>

⁽¹⁾ Represents the unpaid principal balance net of charge-offs and recoveries as of the end of each period.

Nonperforming loans totaled \$89 million as of May 31, 2023, a decrease of \$139 million from May 31, 2022, due to the receipt of loan principal payments, the partial charge-offs related to the Brazos and Brazos Sandy Creek nonperforming loans, and the classification of Brazos’ nonperforming loans to nonperforming TDR loans during the third quarter of fiscal year 2023, as discussed above. Brazos’ loans outstanding accounted for \$86 million of our total nonperforming loans as of May 31, 2022 and were delinquent and on nonaccrual as of this date.

Brazos Sandy Creek, a wholly-owned subsidiary of Brazos and a CFC Texas-based electric power supply borrower, filed for bankruptcy in March 2022 following the filing of a motion by Brazos to reject its power purchase agreement with Brazos Sandy Creek as part of Brazos’ bankruptcy proceedings. Brazos Sandy Creek’s loan outstanding accounted for \$4 million and \$28 million of our total nonperforming loans as of May 31, 2023 and 2022, respectively, and was delinquent and on nonaccrual as of each date. The loan is secured by Brazos Sandy Creek’s 25% tenant-in-common (“TIC”) ownership interest in the Brazos Sandy Creek Energy Station (“the Plant”), and its rights under a power purchase agreement (“PPA”) with Brazos for the output of the Brazos Sandy Creek Energy Station attributable to the TIC interest. On December 20, 2022, Brazos Sandy Creek’s 25% TIC ownership interest in the Plant was sold for a credit bid of \$105 million to Riesel HoldCo, LLC (“HoldCo,”) an entity formed by the Brazos Sandy Creek noteholders. CFC was allocated ownership shares in HoldCo based on its 7.41% share in the \$105 million credit bid, which totaled \$8 million that was recorded as an equity investment in HoldCo during the current fiscal year in the other assets line of our consolidated balance sheets and reduced the Brazos Sandy Creek loan balance by the same amount. HoldCo intends to manage its ownership interest in the Plant directly and potentially sell it at a future date; however, HoldCo has no current timeline for its disposition. In July 2023, we received the remaining payment of Brazos Sandy Creek’s loan outstanding of \$4 million to repay its loans in full.

Net Charge-Offs

Charge-offs represent the amount of a loan that has been removed from our consolidated balance sheet when the loan is deemed uncollectible. Generally the amount of a charge-off is the recorded investment in excess of the discounted expected

[Table of Contents](#)

cash flows from the loan, or, if the loan is collateral dependent, the fair value of the underlying collateral securing the loan. We report charge-offs net of amounts recovered on previously charged off loans. We experienced charge-offs totaling \$15 million for the CFC electric power supply loan portfolio related to Brazos and Brazos Sandy Creek loans during fiscal year 2023, which resulted in a net charge-off rate of 0.05%. In comparison, we had no loan charge-offs during fiscal years 2022 and 2021. Prior to Brazos' and Brazos Sandy Creek's bankruptcy filings, we had not experienced any defaults or charge-offs in our electric utility and telecommunications loan portfolios since fiscal years 2013 and 2017, respectively.

In our 54-year history, we have experienced only 18 defaults in our electric utility loan portfolio, which includes our most recent defaults by Brazos and Brazos Sandy Creek due to their bankruptcy filing in March 2021 and March 2022, respectively. Of the 18 defaults, one remains unresolved with an expected ultimate resolution date in calendar year 2025; nine resulted in no loss; and eight resulted in cumulative net charge-offs of \$101 million. Of this amount, \$82 million was attributable to seven electric power supply cooperatives and \$19 million was attributable to one electric distribution cooperative. We historically have experienced high recovery rates for our electric loan portfolio. This can be attributed to several factors (i) the unique organizational structure and operating environment of rural electric utility cooperatives, (ii) our lending policy that typically mandates a senior security position on borrowers' assets and revenue for long-term loans, (iii) the significant investment our member borrowers have in CFC and (iv) our collaborative approach when working with members in the event of a default. We cite the factors that have historically contributed to the relatively low risk of default by our electric utility cooperatives, our principal lending market, above under "Credit Risk—Loan Portfolio Credit Risk."

In comparison, since inception in 1987, we have experienced 17 defaults and cumulative net charge-offs of \$427 million in our telecommunications loan portfolio, the most significant of which was a charge-off of \$354 million in fiscal year 2011.

Borrower Risk Ratings

As part of our management of credit risk, we maintain a credit risk-rating framework under which we employ a consistent process for assessing the credit quality of our loan portfolio. We evaluate each borrower and loan facility in our loan portfolio and assign internal borrower and loan facility risk ratings based on consideration of a number of quantitative and qualitative factors. We categorize loans in our portfolio based on our internally assigned borrower risk ratings, which are intended to assess the general creditworthiness of the borrower and probability of default. Our borrower risk ratings align with the U.S. federal banking regulatory agencies' credit risk definitions of pass and criticized categories, with the criticized category further segmented among special mention, substandard and doubtful. Pass ratings reflect relatively low probability of default, while criticized ratings have a higher probability of default. Our internally assigned borrower risk ratings serve as the primary credit quality indicator for our loan portfolio. Because our internal borrower risk ratings provide important information on the probability of default, they are a key input in determining our allowance for credit losses.

We use our internal risk ratings to measure the credit risk of each borrower and loan facility, identify or confirm problem or potential problem loans in a timely manner, differentiate risk within each of our portfolio segments, assess the overall credit quality of our loan portfolio and manage overall risk levels. Our internally assigned borrower risk ratings, which we map to equivalent credit ratings by external credit rating agencies, serve as the primary credit quality indicator for our loan portfolio. Because our internal borrower risk ratings provide important information on the probability of default, they are a key input in estimating our allowance for credit losses.

Criticized loans totaled \$323 million and \$494 million as of May 31, 2023 and 2022, respectively, and represented approximately 1% and 2% of total loans outstanding as of each respective date. The decrease of \$171 million in criticized loans was due primarily to loan payments received from a CFC electric distribution borrower in the special mention category, and from a CFC electric power supply borrower, Brazos and Brazos Sandy Creek in the doubtful category, and the partial charge-offs related to Brazos and Brazos Sandy Creek during fiscal year 2023. Each of the borrowers with loans outstanding in the criticized category, with the exception of Brazos Sandy Creek, was current with regard to all principal and interest amounts due to us as of May 31, 2023. In contrast, each of the borrowers with loans outstanding in the criticized category, with the exception of Brazos and Brazos Sandy Creek, which filed for bankruptcy in March 2021 and March 2022, respectively, was current with regard to all principal and interest amounts due to us as of May 31, 2022. As mentioned above, subsequent to the year ended May 31, 2023, we received the remaining loan payments of \$23 million and \$4 million from Brazos and Brazos Sandy Creek, respectively, to repay their loans in full. See "Troubled Debt Restructurings" and "Nonperforming Loans" above for additional information on Brazos and Brazos Sandy Creek, respectively.

We provide additional information on our borrower risk rating classifications, including the amount of loans outstanding in each of the criticized loan categories of special mention, substandard and doubtful, in “Note 1—Summary of Significant Accounting Policies” and “Note 4—Loans” in this Report.

Allowance for Credit Losses

We are required to maintain an allowance based on a current estimate of credit losses that are expected to occur over the remaining contractual term of the loans in our portfolio. Our allowance for credit losses consists of a collective allowance and an asset-specific allowance. The collective allowance is established for loans in our portfolio that share similar risk characteristics and are therefore evaluated on a collective, or pool, basis in measuring expected credit losses. The asset-specific allowance is established for loans in our portfolio that do not share similar risk characteristics with other loans in our portfolio and are therefore evaluated on an individual basis in measuring expected credit losses.

Table 19 presents, by legal entity and member class, loans outstanding and the related allowance for credit losses and allowance coverage ratio as of May 31, 2023 and 2022 and the allowance components as of each date.

Table 19: Allowance for Credit Losses by Borrower Member Class and Evaluation Methodology

(Dollars in thousands)	May 31,					
	2023			2022		
	Loans Outstanding ⁽¹⁾	Allowance for Credit Losses	Allowance Coverage Ratio ⁽²⁾	Loans Outstanding ⁽¹⁾	Allowance for Credit Losses	Allowance Coverage Ratio ⁽²⁾
Member class:						
CFC:						
Distribution	\$ 25,437,077	\$ 14,924	0.06 %	\$ 23,844,242	\$ 15,781	0.07 %
Power supply	5,437,242	33,306	0.61	4,901,770	47,793	0.98
Statewide and associate	200,368	1,194	0.60	126,863	1,251	0.99
Total CFC	<u>31,074,687</u>	<u>49,424</u>	<u>0.16</u>	<u>28,872,875</u>	<u>64,825</u>	<u>0.22</u>
NCSC	956,874	2,464	0.26	710,878	1,449	0.20
RTFC	487,788	1,206	0.25	467,601	1,286	0.28
Total	<u>\$ 32,519,349</u>	<u>\$ 53,094</u>	<u>0.16</u>	<u>\$ 30,051,354</u>	<u>\$ 67,560</u>	<u>0.22</u>
Allowance components:						
Collective allowance	\$ 32,398,910	\$ 27,335	0.08 %	\$ 29,814,380	\$ 28,876	0.10 %
Asset-specific allowance	120,439	25,759	21.39	236,974	38,684	16.32
Total	<u>\$ 32,519,349</u>	<u>\$ 53,094</u>	<u>0.16</u>	<u>\$ 30,051,354</u>	<u>\$ 67,560</u>	<u>0.22</u>
Allowance coverage ratios:						
Nonaccrual loans ⁽³⁾	\$ 112,209		47.32 %	\$ 227,790		29.66 %

⁽¹⁾ Represents the unpaid principal balance, net of discounts, charge-offs and recoveries, of loans as of each period-end. Excludes unamortized deferred loan origination costs of \$13 million and \$12 million as of May 31, 2023 and 2022, respectively.

⁽²⁾ Calculated based on the allowance for credit losses attributable to each member class and allowance components at period-end divided by the related loans outstanding at period-end.

⁽³⁾ Calculated based on the total allowance for credit losses at period-end divided by loans outstanding classified as nonperforming and nonperforming TDR loans, and on nonaccrual status at period-end. Nonaccrual loans represented 0.35% and 0.76% of total loans outstanding as of May 31, 2023 and 2022, respectively. We provide additional information on our nonaccrual loans in “Note 4—Loans” in this Report.

The allowance for credit losses and allowance coverage ratio was \$53 million and 0.16%, respectively, as of May 31, 2023, a decrease of \$15 million and 6 basis points, respectively, from May 31, 2022, due to reductions in the asset-specific allowance and the collective allowance of \$13 million and \$2 million, respectively. The decrease in asset-specific allowance was primarily attributable to charge-offs totaling \$15 million related to the Brazos and Brazos Sandy Creek loans, partially offset by an increase in the asset-specific allowance for Brazos, Brazos Sandy Creek and a nonperforming CFC power supply loan, due to a reduction and timing change in the expected payments on this loan. The decrease in the collective

allowance was primarily attributable to an improvement in the credit quality and risk profile of our loan portfolio, and in the timing of the scheduled loan-level amortization amounts of our loan portfolio, partially offset by an increase in the collective allowance due to the loan portfolio growth.

We discuss our methodology for estimating the allowance for credit losses under the CECL model in “Note 1—Summary of Significant Accounting Policies—Allowance for Credit Losses” and provide information on management’s judgment and the uncertainties involved in our determination of the allowance for credit losses in the above section “Critical Accounting Estimates—Allowance for Credit Losses” of this Report. We provide additional information on our loans and allowance for credit losses under “Note 4—Loans” and “Note 5—Allowance for Credit Losses” of this Report.

Counterparty Credit Risk

In addition to credit exposure from our borrowers, we enter into other types of financial transactions in the ordinary course of business that expose us to counterparty credit risk, primarily related to transactions involving our cash and cash equivalents, securities held in our investment securities portfolio and derivatives. We mitigate our risk by only entering into these transactions with counterparties with investment-grade ratings, establishing operational guidelines and counterparty exposure limits and monitoring our counterparty credit risk position. We evaluate our counterparties based on certain quantitative and qualitative factors and periodically assign internal risk-rating grades to our counterparties.

Cash and Investments Securities Counterparty Credit Exposure

Our cash and cash equivalents, and investment securities totaled \$199 million and \$510 million, respectively, as of May 31, 2023. The primary credit exposure associated with investments held in our investments portfolio is that issuers will not repay principal and interest in accordance with the contractual terms. Our cash and cash equivalents with financial institutions generally have an original maturity of less than one year and pursuant to our investment policy guidelines, all fixed-income debt securities, at the time of purchase, must be rated at least investment grade based on external credit ratings from at least two of the leading global credit rating agencies, when available, or the corresponding equivalent, when not available. We therefore believe that the risk of default by these counterparties is low. As of May 31, 2023, our overall counterparty credit risk was deemed to be satisfactory and not materially changed compared with May 31, 2022.

We provide additional information on the holdings in our investment securities portfolio below under “Liquidity Risk—Investment Securities Portfolio” and in “Note 3—Investment Securities.”

Derivative Counterparty Credit Exposure

Our derivative counterparty credit exposure relates principally to interest-rate swap contracts. We generally engage in OTC derivative transactions, which expose us to individual counterparty credit risk because these transactions are executed and settled directly between us and each counterparty. We are exposed to the risk that an individual derivative counterparty defaults on payments due to us, which we may not be able to collect or which may require us to seek a replacement derivative from a different counterparty. This replacement may be at a higher cost, or we may be unable to find a suitable replacement.

We manage our derivative counterparty credit exposure by executing derivative transactions with financial institutions that have investment-grade credit ratings and maintaining enforceable master netting arrangements with these counterparties, which allow us to net derivative assets and liabilities with the same counterparty. We had 12 active derivative counterparties with credit ratings ranging from Aa1 to Baa1 by Moody’s as of both May 31, 2023 and 2022, and from AA- to A- by S&P as of both May 31, 2023 and 2022. The total outstanding notional amount of derivatives with these counterparties was \$7,816 million and \$8,062 million as of May 31, 2023 and 2022, respectively. The highest single derivative counterparty concentration, by outstanding notional amount, accounted for approximately 23% and 24% of the total outstanding notional amount of our derivatives as of May 31, 2023 and 2022, respectively.

While our derivative agreements include netting provisions that allow for offsetting of all contracts with a given counterparty in the event of default by one of the two parties, we report the fair value of our derivatives on a gross basis by individual contract as either a derivative asset or derivative liability on our consolidated balance sheets. However, we estimate our exposure to credit loss on our derivatives by calculating the replacement cost to settle at current market prices,

as defined in our derivative agreements, all outstanding derivatives in a net gain position at the counterparty level where a right of legal offset exists. We provide information on the impact of netting provisions under our master swap agreements and collateral pledged, if any, in “Note 10—Derivative Instruments and Hedging Activities—Impact of Derivatives on Consolidated Balance Sheets.” We believe our exposure to derivative counterparty risk, at any point in time, is equal to the amount of our outstanding derivatives in a net gain position, at the individual counterparty level, which totaled \$349 million and \$119 million as of May 31, 2023 and 2022, respectively.

We provide additional detail on our derivative agreements, including a discussion of derivative contracts with credit rating triggers and settlement amounts that would be required in the event of a ratings trigger, in “Note 10—Derivative Instruments and Hedging Activities.”

See “Item 1A. Risk Factors” in this Report for additional information about credit risks related to our business.

LIQUIDITY RISK

We define liquidity as the ability to convert assets into cash quickly and efficiently, maintain access to available funding and roll over or issue new debt under normal operating conditions and periods of CFC-specific and/or market stress, to ensure that we can meet borrower loan requests, pay current and future obligations and fund our operations in a cost-effective manner.

In addition to cash on hand, our primary sources of funds include member loan principal repayments, securities held in our investment portfolio, committed bank revolving lines of credit, committed loan facilities under the Guaranteed Underwriter Program, revolving note purchase agreement with Farmer Mac and proceeds from debt issuances to members and in the public capital markets. Our primary uses of funds include loan advances to members, principal and interest payments on borrowings, periodic interest settlement payments related to our derivative contracts and operating expenses.

Liquidity Risk Management

Our liquidity risk-management framework is designed to meet our liquidity objectives of providing a reliable source of funding to members, meet maturing debt and other financial obligations, issue new debt and fund our operations on a cost-effective basis under normal operating conditions as well as under CFC-specific and/or market stress conditions. We engage in various activities to manage liquidity risk and achieve our liquidity objectives. Our Asset Liability Committee establishes guidelines that are intended to ensure we maintain sufficient, diversified sources of liquidity to cover potential funding requirements as well as unanticipated contingencies. Our Treasury group develops strategies to manage our targeted liquidity position, projects our funding needs under various scenarios, including adverse circumstances, and monitors our liquidity position on an ongoing basis.

Available Liquidity

As part of our strategy in managing liquidity risk and meeting our liquidity objectives, we seek to maintain various committed sources of funding that are available to meet our near-term liquidity needs. Table 20 presents a comparison between our available liquidity, which consists of cash and cash equivalents, our debt securities investment portfolio and amounts under committed credit facilities as of May 31, 2023 and 2022.

Table 20: Available Liquidity

(Dollars in millions)	May 31,					
	2023			2022		
	Total	Accessed	Available	Total	Accessed	Available
Liquidity sources:						
Cash and investment debt securities:						
Cash and cash equivalents	\$ 199	\$ —	\$ 199	\$ 154	\$ —	\$ 154
Debt securities investment portfolio ⁽¹⁾	475	—	475	566	—	566
Total cash and investment debt securities	674	—	674	720	—	720
Committed credit facilities:						
Committed bank revolving line of credit agreements—unsecured ⁽²⁾	2,600	2	2,598	2,600	3	2,597
Guaranteed Underwriter Program committed facilities—secured ⁽³⁾	9,473	8,448	1,025	8,723	7,648	1,075
Farmer Mac revolving note purchase agreement—secured ⁽⁴⁾	6,000	3,150	2,850	5,500	3,095	2,405
Total committed credit facilities	18,073	11,600	6,473	16,823	10,746	6,077
Total available liquidity	<u>\$18,747</u>	<u>\$ 11,600</u>	<u>\$ 7,147</u>	<u>\$ 17,543</u>	<u>\$ 10,746</u>	<u>\$ 6,797</u>

⁽¹⁾ Represents the aggregate fair value of our portfolio of debt securities as of period-end. Our portfolio of equity securities consists primarily of preferred stock securities that are not as readily redeemable; therefore, we exclude our portfolio of equity securities from our available liquidity.

⁽²⁾ The committed bank revolving line of credit agreements consist of a three-year and a four-year revolving line of credit agreement. The accessed amount of \$2 million and \$3 million as of May 31, 2023 and 2022, respectively, relates to letters of credit issued pursuant to the four-year revolving line of credit agreement.

⁽³⁾ The committed facilities under the Guaranteed Underwriter Program are not revolving.

⁽⁴⁾ Availability subject to market conditions.

Although as a nonbank financial institution we are not subject to regulatory liquidity requirements, our liquidity-management framework includes monitoring our liquidity and funding positions on an ongoing basis and assessing our ability to meet our scheduled debt obligations and other cash flow requirements based on point-in-time metrics as well as forward-looking projections. Our liquidity and funding assessment takes into consideration amounts available under existing liquidity sources, the expected rollover of member short-term investments and scheduled loan principal payment amounts, as well as our continued ability to access the capital markets and other non-capital market-related funding sources.

Liquidity Risk Assessment

We utilize several measures to assess our liquidity risk and ensure we have adequate coverage to meet our liquidity needs. Our primary liquidity measures indicate the extent to which we have sufficient liquidity to cover the payment of scheduled debt obligations over the next 12 months. We calculate our liquidity coverage ratios under several scenarios that take into consideration various assumptions about our near-term sources and uses of liquidity, including the assumption that maturities of member short-term investments will not have a significant impact on our anticipated cash outflows. Our members have historically maintained a relatively stable level of short-term investments in CFC in the form of daily liquidity fund notes, commercial paper, select notes and medium-term notes. As such, we expect that our members will continue to reinvest their excess cash in short-term investment products offered by CFC.

Table 21 presents our primary liquidity coverage ratios as of May 31, 2023 and 2022 and displays the calculation of each ratio as of these respective dates based on the assumptions discussed above.

Table 21: Liquidity Coverage Ratios

(Dollars in millions)	May 31,	
	2023	2022
Liquidity coverage ratio:⁽¹⁾		
Total available liquidity ⁽²⁾	\$ 7,147	\$ 6,797
Debt scheduled to mature over next 12 months:		
Short-term borrowings	4,546	4,981
Long-term and subordinated debt scheduled to mature over next 12 months	2,383	1,913
Total debt scheduled to mature over next 12 months	6,929	6,894
Excess (deficit) in available liquidity over debt scheduled to mature over next 12 months	\$ 218	\$ (97)
Liquidity coverage ratio	1.03	0.99
Liquidity coverage ratio, excluding expected maturities of member short-term investments⁽³⁾		
Total available liquidity ⁽²⁾	\$ 7,147	\$ 6,797
Total debt scheduled to mature over next 12 months	6,929	6,894
Exclude: Member short-term investments	(3,253)	(3,956)
Total debt, excluding member short-term investments, scheduled to mature over next 12 months	3,676	2,938
Excess in available liquidity over total debt, excluding member short-term investments, scheduled to mature over next 12 months	\$ 3,471	\$ 3,859
Liquidity coverage ratio, excluding expected maturities of member short-term investments	1.94	2.31

⁽¹⁾Calculated based on available liquidity at period-end divided by total debt scheduled to mature over the next 12 months at period-end.

⁽²⁾Total available liquidity is presented above in Table 20.

⁽³⁾Calculated based on available liquidity at period-end divided by debt, excluding member short-term investments, scheduled to mature over the next 12 months.

Investment Securities Portfolio

We have an investment portfolio of debt securities classified as trading and equity securities, both of which are reported on our consolidated balance sheets at fair value. The aggregate fair value of the securities in our investment portfolio was \$510 million as of May 31, 2023, consisting of debt securities with a fair value of \$475 million and equity securities with a fair value of \$35 million. In comparison, the aggregate fair value of the securities in our investment portfolio was \$600 million as of May 31, 2022, consisting of debt securities with a fair value of \$566 million and equity securities with a fair value of \$34 million.

Our debt securities investment portfolio is intended to serve as an additional source of liquidity and is structured so that the securities generally have active secondary or resale markets under normal market conditions. The objective of the portfolio is to achieve returns commensurate with the level of risk assumed subject to CFC's investment policy and guidelines and liquidity requirements. Pursuant to our investment policy and guidelines, all fixed-income debt securities, at the time of purchase, must be rated at least investment grade based on external credit ratings from at least two of the leading global credit rating agencies, when available, or the corresponding equivalent, when not available. Securities rated investment grade, that is those rated Baa3 or higher by Moody's or BBB- or higher by S&P or BBB- or higher by Fitch, are generally considered by the rating agencies to be of lower credit risk than non-investment-grade securities.

Under master repurchase agreements that we have with counterparties, we can obtain short-term funding by selling investment-grade corporate debt securities from our investment portfolio subject to an obligation to repurchase the same or similar securities at an agreed-upon price and date. Because we retain effective control over the transferred securities, transactions under these repurchase agreements are accounted for as collateralized financing agreements (i.e., secured borrowings) and not as a sale and subsequent repurchase of securities. The obligation to repurchase the securities is reflected

as a component of our short-term borrowings on our consolidated balance sheets. The aggregate fair value of debt securities underlying repurchase transactions is parenthetically disclosed on our consolidated balance sheets. We had no borrowings under repurchase agreements outstanding as of both May 31, 2023 and 2022; therefore, we had no debt securities in our investment portfolio pledged as collateral as of each respective date.

We provide additional information on our investment securities portfolio in “Note 3—Investment Securities” of this Report.

Borrowing Capacity Under Various Credit Facilities

The aggregate borrowing capacity under our committed bank revolving line of credit agreements, committed loan facilities under the Guaranteed Underwriter Program and revolving note purchase agreement with Farmer Mac totaled \$18,073 million and \$16,823 million as of May 31, 2023 and 2022, respectively, and the aggregate amount available for access totaled \$6,473 million and \$6,077 million as of each respective date. The following is a discussion of our borrowing capacity and key terms and conditions under each of these credit facilities.

Committed Bank Revolving Line of Credit Agreements—Unsecured

Our committed bank revolving lines of credit may be used for general corporate purposes; however, we generally rely on them as a backup source of liquidity for our member and dealer commercial paper. On October 20, 2022, we amended the three-year and four-year committed bank revolving line of credit agreements to extend the maturity dates to November 28, 2025 and November 28, 2026, respectively, and to replace LIBOR with Term SOFR. The total commitment amount under the three-year facility and the four-year facility remained unchanged at \$1,245 million and \$1,355 million, respectively, resulting in a combined total commitment amount under the two facilities of \$2,600 million. Under our current committed bank revolving line of credit agreements, we have the ability to request up to \$300 million of letters of credit, which would result in a reduction in the remaining available amount under the facilities.

Table 22 presents the total commitment amount under our committed bank revolving line of credit agreements, outstanding letters of credit and the amount available for access as of May 31, 2023.

Table 22: Committed Bank Revolving Line of Credit Agreements

(Dollars in millions)	May 31, 2023			Maturity	Annual Facility Fee ⁽¹⁾
	Total Commitment	Letters of Credit Outstanding	Amount Available for Access		
Bank revolving line of credit term:					
3-year agreement.....	\$ 1,245	\$ —	\$ 1,245	November 28, 2025	7.5 bps
4-year agreement.....	1,355	2	1,353	November 28, 2026	10.0 bps
Total.....	<u>\$ 2,600</u>	<u>\$ 2</u>	<u>\$ 2,598</u>		

⁽¹⁾Facility fee based on CFC’s senior unsecured credit ratings in accordance with the established pricing schedules at the inception of the related agreement.

We did not have any outstanding borrowings under our committed bank revolving line of credit agreements as of May 31, 2023; however, we had letters of credit outstanding of \$2 million under the four-year committed bank revolving agreement as of this date.

Although our committed bank revolving line of credit agreements do not contain a material adverse change clause or rating triggers that would limit the banks’ obligations to provide funding under the terms of the agreements, we must be in compliance with the covenants to draw on the facilities. We have been and expect to continue to be in compliance with the covenants under our committed bank revolving line of credit agreements. As such, we could draw on these facilities to repay dealer or member commercial paper that cannot be rolled over.

Guaranteed Underwriter Program Committed Facilities—Secured

Under the Guaranteed Underwriter Program, we can borrow from the Federal Financing Bank and use the proceeds to extend new loans to our members and refinance existing member debt. As part of the program, we pay fees based on our outstanding borrowings that are intended to help fund the USDA Rural Economic Development Loan and Grant program, and thereby support additional investment in rural economic development projects. The borrowings under this program are guaranteed by RUS. Each advance is subject to quarterly amortization and a final maturity not longer than 30 years from the date of the advance.

On December 15, 2022, we closed on a \$750 million committed loan facility (“Series T”) from the Federal Financing Bank under the Guaranteed Underwriter Program. Pursuant to this facility, we may borrow any time before July 15, 2027. Each advance is subject to quarterly amortization and a final maturity not longer than 30 years from the date of the advance. The closing of this facility increased our total committed borrowing amount under the Guaranteed Underwriter Program to \$9,473 million as of May 31, 2023, from \$8,723 million as of May 31, 2022.

As displayed in Table 20, we had accessed \$8,448 million under the Guaranteed Underwriter Program and up to \$1,025 million was available for borrowing as of May 31, 2023. Of the \$1,025 million available borrowing amount, \$275 million is available for advance through July 15, 2026 and \$750 million is available for advance through July 15, 2027. We are required to pledge eligible distribution system loans or power supply system loans as collateral in an amount at least equal to our total outstanding borrowings under the Guaranteed Underwriter Program committed loan facilities, which totaled \$6,721 million as of May 31, 2023.

The notes payable to FFB and guaranteed by RUS under the Guaranteed Underwriter Program contain a provision that if during any portion of the fiscal year, our senior secured credit ratings do not have at least two of the following ratings: (i) A3 or higher from Moody’s, (ii) A- or higher from S&P, (iii) A- or higher from Fitch or (iv) an equivalent rating from a successor rating agency to any of the above rating agencies, we may not make cash patronage capital distributions in excess of 5% of total patronage capital.

Farmer Mac Revolving Note Purchase Agreement—Secured

We have a revolving note purchase agreement with Farmer Mac, under which we can borrow up to \$6,000 million from Farmer Mac, at any time, subject to market conditions through June 30, 2027. The agreement has successive automatic one-year renewals beginning June 30, 2026, unless Farmer Mac provides 425 days’ written notice of non-renewal. Pursuant to this revolving note purchase agreement, we can borrow, repay and re-borrow funds at any time through maturity, as market conditions permit, provided that the outstanding principal amount at any time does not exceed the total available under the agreement. Each borrowing under the revolving note purchase agreement is evidenced by a pricing agreement setting forth the interest rate, maturity date and other related terms as we may negotiate with Farmer Mac at the time of each such borrowing. We may select a fixed rate or variable rate at the time of each advance with a maturity as determined in the applicable pricing agreement.

Under this agreement, we had outstanding secured notes payable totaling \$3,150 million and \$3,095 million as of May 31, 2023 and 2022, respectively. We borrowed and repaid \$500 million in short-term notes payable and borrowed \$550 million in long-term notes payable under this note purchase agreement with Farmer Mac during fiscal year 2023. As displayed in Table 20, the amount available for borrowing under this agreement was \$2,850 million as of May 31, 2023. We are required to pledge eligible electric distribution system or electric power supply system loans as collateral in an amount at least equal to the total principal amount of notes outstanding, under this agreement. Subsequent to the year ended May 31, 2023, we borrowed \$500 million in short-term notes payable under this note purchase agreement with Farmer Mac.

We provide additional information on pledged collateral below under “Pledged Collateral” in this section and “Note 4—Loans.”

Short-Term Borrowings

Our short-term borrowings, which we rely on to meet our daily, near-term funding needs, consist of commercial paper, which we offer to members and dealers, select notes and daily liquidity fund notes offered to members, medium-term notes offered to members and dealers, and funds from repurchase secured borrowing transactions.

Table 23: Short-Term Borrowings—Outstanding Amount and Weighted-Average Interest Rates

(Dollars in thousands)	May 31,			
	2023		2022	
	Outstanding Amount	Weighted-Average Interest Rate	Outstanding Amount	Weighted-Average Interest Rate
Short-term borrowings:				
Commercial paper:				
Commercial paper sold through dealers, net of discounts.....	\$ 1,293,167	5.32 %	\$1,024,813	0.96 %
Commercial paper sold directly to members, at par.....	1,017,431	4.76	1,358,069	0.92
Total commercial paper.....	2,310,598	5.07	2,382,882	0.94
Select notes to members.....	1,630,799	4.96	1,753,441	1.11
Daily liquidity fund notes.....	238,329	4.35	427,790	0.80
Medium-term notes sold to members.....	366,549	4.64	417,054	0.66
Total short-term borrowings outstanding.....	\$ 4,546,275	4.96	\$4,981,167	0.97

Short-term borrowings decreased by \$435 million to \$4,546 million as of May 31, 2023, from \$4,981 million as of May 31, 2022, and accounted for 15% and 17% of total debt outstanding as of each respective date. The decrease in short-term borrowings was driven primarily by a decrease in short-term member investments, partially offset by increases in outstanding dealer commercial paper. The weighted-average cost of our outstanding short-term borrowings increased to 4.96% as of May 31, 2023, from 0.97% as of May 31, 2022. The weighted-average maturity of our short-term borrowings increased to 44 days as of May 31, 2023, from 42 days as of May 31, 2022.

Member investments have historically been our primary source of short-term borrowings. Table 24 displays the composition, by funding source, of our short-term borrowings as of May 31, 2023 and 2022, of which members' investments represented 72% and 79% of our outstanding short-term borrowings as of each respective date.

Table 24: Short-Term Borrowings—Funding Sources

(Dollars in thousands)	May 31,			
	2023		2022	
	Outstanding Amount	% of Total Short-Term Borrowings	Outstanding Amount	% of Total Short-Term Borrowings
Funding source:				
Members.....	\$ 3,253,108	72 %	\$3,956,354	79 %
Capital markets.....	1,293,167	28	1,024,813	21
Total.....	\$ 4,546,275	100 %	\$4,981,167	100 %

Our intent is to manage our short-term wholesale funding risk by maintaining the dealer commercial paper outstanding at each quarter-end within a range of \$1,000 million to \$1,500 million, although the intra-period amount of dealer commercial paper outstanding may fluctuate based on our liquidity requirements. Dealer commercial paper outstanding of \$1,293 million and \$1,025 million as of May 31, 2023 and 2022, respectively, was within our quarter-end target range of \$1,000 million to \$1,500 million.

See “Note 6—Short-Term Borrowing” for additional information on our short-term borrowings.

Long-Term and Subordinated Debt

Long-term and subordinated debt, which represents the most significant source of our funding, totaled \$26,453 million and \$23,766 million as of May 31, 2023 and 2022, respectively, and accounted for 85% and 83% of total debt outstanding as of each respective date. The increase in long-term and subordinated debt was primarily due to debt issuances totaling \$4,589 million to fund loan portfolio growth during fiscal year 2023, partially offset by debt repayments totaling \$1,934 million during the current fiscal year, as presented below in table 25.

Subsequent to the year ended May 31, 2023, we issued \$400 million aggregate principal amount of dealer medium-term notes at a fixed rate of 5.05% due on September 15, 2028 and redeemed \$100 million in principal amount of our \$400 million subordinated deferrable debt due 2043, at par plus accrued interest.

The issuance of long-term debt allows us to reduce our reliance on short-term borrowings and effectively manage our refinancing and interest rate risk, due in part to the multi-year contractual maturity structure of long-term debt. In addition to access to private debt facilities, we also issue debt in the public capital markets. Pursuant to Rule 405 of the Securities Act, we are classified as a “well-known seasoned issuer.” Under our effective shelf registration statements filed with the U.S. Securities and Exchange Commission (“SEC”), we may offer and issue the following debt securities:

- an unlimited amount of collateral trust bonds and senior and subordinated debt securities, including medium-term notes, member capital securities and subordinated deferrable debt, until October 2023; and
- daily liquidity fund notes up to \$20,000 million in the aggregate—with a \$3,000 million limit on the aggregate principal amount outstanding at any time—until March 2025.

Although we register member capital securities and the daily liquidity fund notes with the SEC, these securities are not available for sale to the general public. Medium-term notes are available for sale to both the general public and members. Notwithstanding the foregoing, we have contractual limitations with respect to the amount of senior indebtedness we may incur.

Long-Term Debt and Subordinated Debt—Issuances and Repayments

Table 25 summarizes long-term and subordinated debt issuances and repayments during fiscal year 2023.

Table 25: Long-Term and Subordinated Debt—Issuances and Repayments

(Dollars in thousands)	Year Ended May 31, 2023	
	Issuances	Repayments ⁽¹⁾
Debt product type:		
Collateral trust bonds	\$ 1,050,000	\$ 355,000
Guaranteed Underwriter Program notes payable	800,000	184,831
Farmer Mac notes payable	550,000	494,781
Medium-term notes sold to members	171,651	56,788
Medium-term notes sold to dealers	1,710,779	821,549
Other notes payable	—	3,565
Subordinated deferrable debt	300,000	—
Members’ subordinated certificates	6,133	17,168
Total	<u>\$ 4,588,563</u>	<u>\$ 1,933,682</u>

⁽¹⁾Repayments include principal maturities, scheduled amortization payments, repurchases and redemptions.

We provide additional information on our financing activities under the above section “Consolidated Balance Sheet Analysis—Debt” and on the weighted-average interest rates on our long-term debt and subordinated certificates in “Note 7—Long-Term Debt,” “Note 8—Subordinated Deferrable Debt” and “Note 9—Members’ Subordinated Certificates” of this Report.

Pledged Collateral

Under our secured borrowing agreements we are required to pledge loans, investment debt securities or other collateral and maintain certain pledged collateral ratios. Of our total debt outstanding of \$30,999 million as of May 31, 2023, \$17,450 million, or 56%, was secured by pledged loans totaling \$21,038 million. In comparison, of our total debt outstanding of \$28,747 million as of May 31, 2022, \$16,051 million, or 56%, was secured by pledged loans totaling \$19,062 million. Following is additional information on the collateral pledging requirements for our secured borrowing agreements.

Secured Borrowing Agreements—Pledged Loan Requirements

We are required to pledge loans or other collateral in transactions under our collateral trust bond indentures, bond agreements under the Guaranteed Underwriter Program and note purchase agreement with Farmer Mac. Total debt outstanding is presented on our consolidated balance sheets net of unamortized discounts and issuance costs. Our collateral pledging requirements are based, however, on the face amount of secured outstanding debt, which excludes net unamortized discounts and issuance costs. However, as discussed below, we typically maintain pledged collateral in excess of the required percentage. Under the provisions of our committed bank revolving line of credit agreements, the excess collateral that we are allowed to pledge cannot exceed 150% of the outstanding borrowings under our collateral trust bond indentures, the Guaranteed Underwriter Program or the Farmer Mac note purchase agreements.

Table 26 displays the collateral coverage ratios pursuant to these secured borrowing agreements as of May 31, 2023 and 2022.

Table 26: Collateral Pledged

	Requirement Coverage Ratios		Actual Coverage Ratios ⁽¹⁾	
	Minimum Debt Indentures	Maximum Committed Bank Revolving Line of Credit Agreements	May 31,	
			2023	2022
Secured borrowing agreement type:				
Collateral trust bonds 1994 indenture	100 %	150 %	115 %	118 %
Collateral trust bonds 2007 indenture	100	150	114	123
Guaranteed Underwriter Program notes payable	100	150	117	113
Farmer Mac notes payable	100	150	136	111
Clean Renewable Energy Bonds Series 2009A ⁽²⁾	100	150	129	128

⁽¹⁾Calculated based on the amount of collateral pledged divided by the face amount of outstanding secured debt.

⁽²⁾Collateral includes cash pledged.

Table 27 displays the unpaid principal balance of loans pledged for secured debt, the excess collateral pledged and unencumbered loans as of May 31, 2023 and 2022.

Table 27: Loans—Unencumbered Loans

(Dollars in thousands)	May 31,	
	2023	2022
Total loans outstanding ⁽¹⁾	\$ 32,519,349	\$ 30,051,354
Less: Loans required pledged under secured debt agreements ⁽²⁾	(17,664,350)	(16,300,618)
Loans pledged in excess of required amount ⁽²⁾⁽³⁾	(3,373,580)	(2,761,335)
Total pledged loans	\$ (21,037,930)	\$ (19,061,953)
Unencumbered loans	\$ 11,481,419	\$ 10,989,401
Unencumbered loans as a percentage of total loans outstanding	35 %	37 %

⁽¹⁾Represents the unpaid principal balance of loans as of the end of each period. Excludes unamortized deferred loan origination costs of \$13 million and \$12 million as of May 31, 2023 and 2022, respectively.

⁽²⁾Reflects unpaid principal balance of pledged loans.

⁽³⁾Excludes cash collateral pledged to secure debt. If there is an event of default under most of our indentures, we can only withdraw the excess collateral if we substitute cash or permitted investments of equal value.

As displayed above in Table 27, we had excess loans pledged as collateral totaling \$3,374 million and \$2,761 million as of May 31, 2023 and 2022, respectively. We typically pledge loans in excess of the required amount for the following reasons: (i) our distribution and power supply loans are typically amortizing loans that require scheduled principal payments over the life of the loan, whereas the debt securities issued under secured indentures and agreements typically have bullet maturities; (ii) distribution and power supply borrowers have the option to prepay their loans; and (iii) individual loans may become ineligible for various reasons, some of which may be temporary.

We provide additional information on our borrowings, including the maturity profile, below in “Liquidity Risk” and additional information on pledged loans in “Note 4—Loans” in this Report. For additional detail on each of our debt product types, refer to “Note 6—Short-Term Borrowings,” “Note 7—Long-Term Debt,” “Note 8—Subordinated Deferrable Debt” and “Note 9—Members’ Subordinated Certificates” in this Report.

Member Loan Repayments

Table 28 displays future scheduled loan principal payment amounts, by member class and by loan type, on loans outstanding as of May 31, 2023, disaggregated by amounts due (i) in one year or less; (ii) after one year up to five years; (iii) after five years up to 15 years; and (iv) after 15 years.

Table 28: Loans—Maturities of Scheduled Principal Payments

(Dollars in thousands)	May 31, 2023				Total
	Due ≤ 1 Year	Due > 1 Year Up to 5 Years	Due > 5 Years Up to 15 Years	Due After 15 Years	
Member class:					
CFC:					
Distribution	\$ 2,679,815	\$ 4,892,899	\$ 10,091,325	\$ 7,773,038	\$ 25,437,077
Power supply	386,214	1,646,435	2,001,077	1,403,516	5,437,242
Statewide and associate	28,341	94,728	35,041	42,258	200,368
Total CFC	<u>3,094,370</u>	<u>6,634,062</u>	<u>12,127,443</u>	<u>9,218,812</u>	<u>31,074,687</u>
NCSC	88,874	409,703	382,975	75,322	956,874
RTFC	57,680	251,759	178,349	—	487,788
Total loans outstanding	<u>\$ 3,240,924</u>	<u>\$ 7,295,524</u>	<u>\$ 12,688,767</u>	<u>\$ 9,294,134</u>	<u>\$ 32,519,349</u>
Loan type:					
Fixed rate	\$ 1,463,050	\$ 5,715,240	\$ 12,351,134	\$ 8,841,934	\$ 28,371,358
Variable rate	1,777,874	1,580,284	337,633	452,200	4,147,991
Total loans outstanding	<u>\$ 3,240,924</u>	<u>\$ 7,295,524</u>	<u>\$ 12,688,767</u>	<u>\$ 9,294,134</u>	<u>\$ 32,519,349</u>

Contractual Obligations

Our contractual obligations affect both our short- and long-term liquidity needs. Our most significant contractual obligations include scheduled payments on our debt obligations. Table 29 displays scheduled amounts due on our debt obligations as of May 31, 2023 and the expected timing of these payments. The amounts presented reflect undiscounted future cash payment amounts due pursuant to these obligations, aggregated by the type of contractual obligation. The table excludes certain obligations that are short-term, such as trade payables, or where the amount is not fixed and determinable, such as derivatives subject to valuation based on market factors. The timing of actual future payments may differ from those

presented due to a number of factors, such as discretionary debt redemptions or changes in interest rates that may impact our expected future cash interest payments.

Table 29: Contractual Obligations⁽¹⁾

(Dollars in thousands)	Payments Due by Period				Total
	In 1 Year or Less	After 1 Year Through 3 Years	After 3 Years Through 5 Years	After 5 Years	
Short-term borrowings	\$ 4,546,275	\$ —	\$ —	\$ —	\$ 4,546,275
Long-term debt	2,277,050	5,813,316	3,788,049	12,303,992	24,182,407
Subordinated deferrable debt	100,000	—	—	1,200,000	1,300,000
Members' subordinated certificates ⁽²⁾	5,861	70,559	13,539	1,133,107	1,223,066
Total long-term and subordinated debt	2,382,911	5,883,875	3,801,588	14,637,099	26,705,473
Contractual interest on long-term debt ⁽³⁾	920,212	1,628,171	1,320,594	6,179,581	10,048,558
Total	\$ 7,849,398	\$ 7,512,046	\$ 5,122,182	\$ 20,816,680	\$ 41,300,306

⁽¹⁾ Callable debt is included in this table at its contractual maturity.

⁽²⁾ Member loan subordinated certificates totaling \$159 million are amortizing annually based on the unpaid principal balance of the related loan. Amortization payments on these certificates totaled \$12 million in fiscal year 2023 and represented 8% of amortizing loan subordinated certificates outstanding.

⁽³⁾ Represents the amounts of future interest payments on long-term and subordinated debt outstanding as of May 31, 2023, based on the contractual terms of the securities. These amounts were determined based on certain assumptions, including that variable-rate debt continues to accrue interest at the contractual rates in effect as of May 31, 2023 until maturity, and redeemable debt continues to accrue interest until its contractual maturity.

Off-Balance Sheet Arrangements

In the ordinary course of business, we engage in financial transactions that are not presented on our consolidated balance sheets, or may be recorded on our consolidated balance sheets in amounts that are different from the full contract or notional amount of the transaction. Our off-balance sheet arrangements consist primarily of unadvanced loan commitments intended to meet the financial needs of our members and guarantees of member obligations, which may affect our liquidity and funding requirements based on the likelihood that borrowers will advance funds under the loan commitments or we will be required to perform under the guarantee obligations. We provide information on our unadvanced loan commitments in “Note 4—Loans” and information on our guarantee obligations in “Note 13—Guarantees.”

Projected Near-Term Sources and Uses of Funds

Table 30 below displays a projection of our primary long-term sources and uses of funds, by quarter, over each of the next six fiscal quarters through the quarter ending November 30, 2024. Our projection is based on the following, which includes several assumptions: (i) the estimated issuance of long-term debt, including capital market and other non-capital market term debt, is based on our market-risk management goal of minimizing the mismatch between the cash flows from our financial assets and our financial liabilities; (ii) long-term loan scheduled amortization repayment amounts represent scheduled loan principal payments for long-term loans outstanding as of May 31, 2023 and estimated loan principal payments for long-term loan advances, plus estimated prepayment amounts on long-term loans; (iii) long-term and subordinated debt maturities consist of both scheduled principal maturity and amortization amounts and projected principal maturity and amortization amounts on term debt outstanding in each period presented; and (iv) long-term loan advances are based on our current projection of member demand for loans. In addition, amounts available under our committed bank revolving lines of credit, net increases in dealer commercial paper and short-term member investments are intended to serve as a backup source of liquidity.

Table 30: Liquidity—Projected Long-Term Sources and Uses of Funds⁽¹⁾

(Dollars in millions)	Projected Long-Term Sources of Funds			Projected Long-Term Uses of Funds		
	Long-Term Debt Issuance	Anticipated Long-Term Loan Repayments ⁽²⁾	Total Projected Long-Term Sources of Funds	Long-Term and Subordinated Debt Maturities ⁽³⁾	Long-Term Loan Advances	Total Projected Long-Term Uses of Funds
1Q FY 2024.....	\$ 868	\$ 384	\$ 1,252	\$ 734	\$ 852	\$ 1,586
2Q FY 2024.....	944	357	1,301	697	858	1,555
3Q FY 2024.....	1,561	382	1,943	1,169	732	1,901
4Q FY 2024.....	207	372	579	180	685	865
1Q FY 2025.....	115	384	499	108	734	842
2Q FY 2025.....	1,020	375	1,395	864	725	1,589
Total.....	\$ 4,715	\$ 2,254	\$ 6,969	\$ 3,752	\$ 4,586	\$ 8,338

⁽¹⁾ The dates presented represent the end of each quarterly period through the quarter ended November 30, 2024.

⁽²⁾ Anticipated long-term loan repayments include scheduled long-term loan amortizations and anticipated cash repayments at repricing date.

⁽³⁾ Long-term debt maturities also include medium-term notes with an original maturity of one year or less and expected early redemptions of debt.

As displayed in Table 30, we currently project long-term advances of \$3,127 million over the next 12 months, which we project will exceed anticipated long-term loan repayments over the same period of \$1,495 million, resulting in net loan growth of approximately \$1,632 million over the next 12 months.

The estimates presented above are developed at a particular point in time based on our expected future business growth and funding. Our actual results and future estimates may vary, perhaps significantly, from the current projections, as a result of changes in market conditions, management actions or other factors.

Credit Ratings

Our funding and liquidity, borrowing capacity, ability to access capital markets and other sources of funds and the cost of these funds are partially dependent on our credit ratings. During fiscal year 2023, Moody's, S&P and Fitch affirmed CFC's credit ratings and stable outlook. Table 31 displays our credit ratings as of May 31, 2023, which remain unchanged as of the date of this Report.

Table 31: Credit Ratings

CFC credit ratings and outlook:	May 31, 2023		
	Moody's	S&P	Fitch
Long-term issuer credit rating ⁽¹⁾	A2	A-	A
Senior secured debt ⁽²⁾	A1	A-	A+
Senior unsecured debt ⁽³⁾	A2	A-	A
Subordinated debt.....	A3	BBB	BBB+
Commercial paper.....	P-1	A-2	F1
Outlook.....	Stable	Stable	Stable
Ratings and outlook confirmation date...	February 16, 2023	December 7, 2022	February 6, 2023

⁽¹⁾Based on our senior unsecured debt rating.

⁽²⁾Applies to our collateral trust bonds.

⁽³⁾Applies to our medium-term notes.

See "Credit Risk—Counterparty Credit Risk—Derivative Counterparty Credit Exposure" above for information on credit rating provisions related to our derivative contracts.

Financial Ratios

Our debt-to-equity ratio decreased to 12.14 as of May 31, 2023, from 13.59 as of May 31, 2022, primarily due to an increase in equity from our reported net income of \$502 million for fiscal year 2023, which was partially offset by a decrease in equity attributable to the CFC Board of Directors' authorized patronage capital retirement in July 2022 of \$59 million.

Our goal is to maintain an adjusted debt-to-equity ratio of approximately 6.00-to-1. Our adjusted debt-to-equity ratio decreased to 6.04 as of May 31, 2023, from 6.24 as of May 31, 2022, primarily due to the May 2023 issuance of \$300 million of 7.125% subordinated deferrable debt due 2053.

Debt Covenants

As part of our short-term and long-term borrowing arrangements, we are subject to various financial and operational covenants. If we fail to maintain specified financial ratios, such failure could constitute a default by CFC of certain debt covenants under our committed bank revolving line of credit agreements and senior debt indentures. We were in compliance with all covenants and conditions under our committed bank revolving line of credit agreements and senior debt indentures as of May 31, 2023.

As discussed above in "Summary of Selected Financial Data," the financial covenants set forth in our committed bank revolving line of credit agreements and senior debt indentures are based on adjusted financial measures, including adjusted TIER. We provide a reconciliation of adjusted TIER and other non-GAAP financial measures disclosed in this Report to the most comparable U.S. GAAP financial measures below in "Non-GAAP Financial Measures."

MARKET RISK

Interest rate risk represents our primary source of market risk, as interest rate volatility can have a significant impact on the earnings and overall financial condition of a financial institution. We are exposed to interest rate risk primarily from the differences in the timing between the maturity or repricing of our loans and the liabilities funding our loans. We seek to generate stable adjusted net interest income on a sustained and long-term basis by minimizing the mismatch between the cash flows from our financial assets and our financial liabilities. We use derivatives as a tool in matching the duration and repricing characteristics of our interest rate-sensitive assets and liabilities.

Below we discuss how we manage and measure interest rate risk. We also provide a status update on actions taken to identify, assess, monitor and mitigate risks associated with the expected discontinuance or unavailability of LIBOR and facilitate an orderly transition from LIBOR as a benchmark interest reference rate to an alternative benchmark rate.

Interest Rate Risk Management

Our interest rate risk-management objective is to prudently manage the timing of cash flows between interest-earning assets and interest-bearing liabilities in order to mitigate interest rate risk in accordance with CFC's board policy and risk limits and guidelines established by the Asset Liability Committee ("ALCO"). ALCO provides oversight of our exposure to interest rate risk and ensures that our exposure is compliant with established risk limits and guidelines. We seek to generate stable adjusted net interest income on a sustained and long-term basis by minimizing the mismatch between the cash flows from our interest rate-sensitive financial assets and our financial liabilities. We use derivatives as a tool in matching the duration and repricing characteristics of our assets and liabilities, which we discuss above in "Consolidated Results of Operations—Non-Interest Income—Derivative Gains (Losses) and "Note 10—Derivative Instruments and Hedging Activities."

Interest Rate Risk Assessment

Our Asset Liability Management ("ALM") framework includes the use of analytic tools and capabilities, enabling CFC to generate a comprehensive profile of our interest rate risk exposure. We routinely measure and assess our interest rate risk exposure using various methodologies through the use of ALM models that enable us to more accurately measure and monitor our interest rate risk exposure under multiple interest rate scenarios using several different techniques. Below we

present two measures used to assess our interest rate risk exposure: (i) the interest rate sensitivity of projected net interest income and adjusted net interest income; and (ii) duration gap.

Interest Rate Sensitivity Analysis

We regularly evaluate the sensitivity of our interest-earning assets and the interest-bearing liabilities funding those assets and our net interest income and adjusted net interest income projections under multiple interest rate scenarios. Each month we update our ALM models to reflect our existing balance sheet position and incorporate different assumptions about forecasted changes in our balance sheet position over the next 12 months. Based on the forecasted balance sheet changes, we generate various projections of net interest income and adjusted net interest income over the next 12 months. Management reviews and assesses these projections and underlying assumptions to identify a baseline scenario of projected net interest income and adjusted net interest income over the next 12 months, which reflects what management considers, at the time, as the most likely scenario. As discussed under “Summary of Selected Financial Data,” we derive adjusted net interest income by adjusting our reported interest expense and net interest income to include the impact of net derivative cash settlements amounts.

Our interest rate sensitivity analyses take into consideration existing interest rate-sensitive assets and liabilities as of the reported balance sheet date and forecasted changes to the balance sheet over the next 12 months under management’s baseline projection. As discussed in the “Executive Summary—Outlook” section, we currently anticipate net long-term loan growth of \$1,632 million over the next 12 months. The June 2023 consensus market outlook for interest rates indicated rising interest rates across the yield curve during the remainder of 2023, followed by a decrease in short-term interest rates during 2024. The yield curve is expected to remain inverted for the remainder of 2023 and, given the expected drop in short-term interest rates in the following year, the yield curve inversion is expected to narrow in 2024, and remain inverted beyond that period. Based on this yield curve forecast, we anticipate a decrease in our reported net interest income and reported net interest yield over the next 12 months relative to the 12-month period ended May 31, 2023. However, we project an increase in our adjusted net interest income over the next 12 months compared with the 12-month period ended May 31, 2023. This is primarily attributable to the expected significant increase in our derivative net periodic cash settlements income, which will contribute to reducing our adjusted cost of borrowings. Additionally, we anticipate a sustained expansion of our loan portfolio, with the variable-rate line of credit loans outstanding remaining at an elevated level. We anticipate a slight decrease in our adjusted net interest yield over the next 12 months relative to the 12-month period ended May 31, 2023, due to the current yield curve assumptions and our balance sheet position.

Table 32 presents the estimated percentage impact that a hypothetical instantaneous parallel shift of plus or minus 100 basis points in the interest rate yield curve, relative to our base case forecast yield curve, would have on our projected baseline 12-month net interest income and adjusted net interest income as of May 31, 2023 and 2022. In instances where the hypothetical instantaneous interest rate shift of minus 100 basis points results in a negative interest rate, we assume an interest rate floor rate of 0% in a negative interest rate. We also present the estimated percentage impact on our projected baseline 12-month net interest income and adjusted net interest income assuming a hypothetical inverted yield curve under which shorter-term interest rates increase by an instantaneous 75 basis points and longer-term interest rates decrease by an instantaneous 75 basis points.

Table 32: Interest Rate Sensitivity Analysis

Estimated Impact ⁽¹⁾	May 31, 2023			May 31, 2022		
	+ 100 Basis Points	- 100 Basis Points	Inverted	+ 100 Basis Points	- 100 Basis Points	Inverted
Net interest income	(4.41)%	4.70%	(5.88)%	(9.76)%	9.68%	(14.25)%
Derivative cash settlements	11.50%	(11.58)%	9.38%	10.49%	(10.49)%	7.95%
Adjusted net interest income ⁽²⁾	7.09%	(6.88)%	3.50%	0.74%	(0.81)%	(6.31)%

⁽¹⁾The actual impact on our reported and adjusted net interest income may differ significantly from the sensitivity analysis presented.

⁽²⁾We include net periodic derivative cash settlement interest expense amounts as a component of interest expense in deriving adjusted net interest income. See the section “Non-GAAP Financial Measures” for a reconciliation of the non-GAAP financial measures presented in this Report to the most comparable U.S. GAAP financial measures.

The changes in the sensitivity measures between May 31, 2023 and 2022 are primarily attributable to an increase in the amount of variable-rate assets being funded with fixed-rate debt, changes in the size and composition of our forecasted balance sheet, as well as changes in current interest rates and forecasted interest rates. As the interest rate sensitivity simulations displayed in Table 32 indicate, we would expect an unfavorable impact on our projected net interest income over a 12-month horizon as of May 31, 2023, under the hypothetical scenario of an instantaneous parallel shift of plus 100 basis points in the interest rate yield curve and a further inverted yield curve. However, we would expect an unfavorable impact on our adjusted net interest income over a 12-month horizon as of May 31, 2023, under the hypothetical scenario of an instantaneous parallel shift of minus 100 basis points in the interest rate yield curve.

Duration Gap

The duration gap, which represents the difference between the estimated duration of our interest-earning assets and the estimated duration of our interest-bearing liabilities, summarizes the extent to which the cash flows for assets and liabilities are matched over time. We use derivatives in managing the differences in timing between the maturities or repricing of our interest-earning assets and the debt funding those assets. A positive duration gap indicates that the duration of our interest-earning assets is greater than the duration of our debt and derivatives, and therefore denotes an increased exposure to rising interest rates over the long term. Conversely, a negative duration gap indicates that the duration of our interest-earning assets is less than the duration of our debt and derivatives, and therefore denotes an increased exposure to declining interest rates over the long term. While the duration gap provides a relatively concise and simple measure of the interest rate risk inherent in our consolidated balance sheet as of the reported date, it does not incorporate projected changes in our consolidated balance sheet.

The duration gap narrowed to negative 1.34 months as of May 31, 2023, from plus 5.29 months as of May 31, 2022 and was within the risk limits and guidelines established by ALCO of each respective date. The narrowing of the duration gap is primarily due to the funding of loan advances and the refinancing of maturing debt during the current fiscal year with longer-duration borrowings, combined with an increase in line of credit loans outstanding of \$845 million, which reduced the duration of interest-earning assets.

Limitations of Interest Rate Risk Measures

While we believe that the interest income sensitivities and duration gap measures provided are useful tools in assessing our interest rate risk exposure, there are inherent limitations in any methodology used to estimate the exposure to changes in market interest rates. These measures should be understood as estimates rather than as precise measurements. The interest rate sensitivity analyses only contemplate certain hypothetical movements in interest rates and are performed at a particular point in time based on the existing balance sheet and, in some cases, expected future business growth and funding mix assumptions. The strategic actions that management may take to manage our balance sheet may differ significantly from our projections, which could cause our actual interest income to differ substantially from the above sensitivity analysis. Moreover, as discussed above, we use various other methodologies to measure and monitor our interest rate risk under multiple interest rate scenarios, which, together, provide a comprehensive profile of our interest rate risk.

LIBOR Transition

In March 2021, the United Kingdom's Financial Conduct Authority and the Intercontinental Exchange Benchmark Administration, the administrator for LIBOR, concurrently announced that certain settings of LIBOR would no longer be published on a representative basis after December 31, 2021, and the most commonly used U.S. dollar LIBOR settings would no longer be published on a representative basis after June 30, 2023. In the fiscal quarter ended November 30, 2021, we began entering into transactions that reference SOFR, and as of June 30, 2023, substantially all of our contracts and financial instruments that previously referenced LIBOR have been transitioned to SOFR.

In connection with the foregoing, we established a cross-functional LIBOR Working Group ("LWG") in 2021 that identified CFC's exposure, assessed the potential risks related to the transition from LIBOR to a new index and developed a strategic transition plan. Our transition effort is focused on two objectives: (i) remediation of our existing LIBOR exposures and (ii) transitioning ongoing activities away from LIBOR. The LWG closely monitored and assessed developments with respect to the LIBOR transition and provided regular reports to our senior management team and the CFC Board of Directors. We have identified all of CFC's LIBOR-based contracts and financial instruments; evaluated the impact of the LIBOR transition

on our existing systems, models and processes; and updated all internal systems to accommodate SOFR as a new index. CFC remediated its LIBOR exposures by transitioning all LIBOR-based contracts to SOFR, including incorporating hardwired fallback language in agreements to transition instruments to SOFR following the cessation of LIBOR or amending agreements to replace LIBOR with a new benchmark index. On October 20, 2022, we amended the three-year and four-year revolving credit agreements to replace LIBOR with Term SOFR. Certain legacy LIBOR instruments are subject to the Adjustable Interest Rate Act of 2021 that was signed into federal law in March 2022, and which provided for the transition of such instruments to SOFR as of June 30, 2023. The LWG has accomplished its objectives and our transition from LIBOR to SOFR as a benchmark interest rate has been completed.

Table 33 summarizes our outstanding LIBOR-indexed financial instruments as of May 31, 2023 that have a contractual maturity date after June 30, 2023, and which were transitioned to SOFR after this date. These financial instruments are included in amounts reported on our consolidated balance sheets.

Table 33: LIBOR-Indexed Financial Instruments

(Dollars in millions)	May 31, 2023
Loans to members, performing	\$ 186
Investment securities ⁽¹⁾	42
Debt	1,592

⁽¹⁾ Amount presented is based on the cost of the investment securities. The aggregate fair value of these investment securities was \$45 million as of May 31, 2023.

In addition to the financial instruments presented in Table 33, as of May 31, 2023, we had outstanding LIBOR-indexed interest rate swaps and unadvanced loan commitments that have a contractual maturity date after June 30, 2023. The aggregate notional amount of these interest rate swaps was \$6,891 million as of May 31, 2023, which represented 88% of the total notional amount of our outstanding interest rate swaps of \$7,816 million as of May 31, 2023. The aggregate amount of the unadvanced loan commitments was \$1,318 million as of May 31, 2023, which represented 9% of the total unadvanced loan commitments of \$14,789 million as of May 31, 2023. These interest rate swaps and unadvanced loan commitments transitioned to SOFR as of July 31, 2023.

We ceased originating new LIBOR-based loans effective December 31, 2021. We have confirmed CFC's adherence to the International Swaps and Derivatives Association, Inc. 2020 LIBOR Fallbacks Protocol for our derivative instruments.

We discuss the risks related to the uncertainty as to the nature of potential changes and other reforms associated with the transition from LIBOR to SOFR as a benchmark interest rate under "Item 1A. Risk Factors" in this Report.

OPERATIONAL RISK

Operational risk represents the risk of loss resulting from conducting our operations, including, but not limited to, the execution of unauthorized transactions by employees; errors relating to loan documentation, transaction processing and technology; the inability to perfect liens on collateral; breaches of internal control and information systems; and the risk of fraud by employees or persons outside the company. Potential legal actions that could arise as a result of operational deficiencies, noncompliance with covenants in our revolving credit agreements and indentures, employee misconduct or adverse business decisions are also considered part of operational risk. In the event of a breakdown in internal controls, improper access to or operation of systems or improper employee actions, we could incur financial loss. Operational risk also includes breaches of our technology and information systems resulting from unauthorized access to confidential information or from internal or external threats, such as cyberattacks. In addition, as we rely on our employees' depth of knowledge of CFC and its related industries to run our business operations successfully, operational risk includes talent management; thereby, failure to attract, motivate and retain sufficient number of highly skilled and specialized employees could adversely affect our business.

Operational risk is inherent in all business activities. The measurement, assessment and effective management of such risk is important to the achievement of our objectives. Operational risk is a core component of CFC's Enterprise Risk Management

framework and is governed by the CFC Board of Directors while management oversight of the risk is the responsibility of the Chief Risk Officer. We maintain related risk guidelines and limits, business policies and procedures, employee training, an internal control framework, and a comprehensive business continuity and disaster recovery plan that are intended to provide a sound operational environment. Our business policies and controls have been designed to manage operational risk at appropriate levels given our financial strength, the business environment and markets in which we operate, and the nature of our businesses, while also considering factors such as competition and regulation. Corporate Compliance monitors compliance with established procedures and applicable laws that are designed to ensure adherence to generally accepted conduct, ethics and business practices defined in our corporate policies. We provide employee compliance training programs, including information protection, Regulation FD (“Fair Disclosure”) compliance and operational risk. Internal Audit examines the design and operating effectiveness of our operational, compliance and financial reporting internal controls on an ongoing basis.

Our business continuity and disaster recovery plan is monitored by our Business Technology Services Group and establishes the basic principles necessary to ensure emergency response, resumption, restoration and permanent recovery of CFC’s operations and business activities during a business interruption event. Each of our departments is required to develop, exercise, test and maintain business resumption plans for the recovery of business functions and processing resources to minimize disruption for our members and other parties with whom we do business. We conduct disaster recovery exercises periodically that include both the Business Technology Services Group and business areas. The business resumption plans are based on a risk assessment that considers potential losses due to unavailability of service versus the cost of resumption. These plans anticipate a variety of probable scenarios ranging from local to regional crises.

We continue to enhance our crisis management framework to provide additional corporate guidance on the management of and response to significant crises that may have an adverse disruptive impact on our business. The crises identified include, but are not limited to, man-made and natural disasters including infectious disease pandemics, technology disruption and workforce issues. The objectives of the enhancements are to ensure, in the event of an identified crisis, we have well-documented plans in place to protect our employees and the work environment, safeguard CFC’s operations, protect CFC’s brand and reputation and minimize the impact of business disruptions. We conducted a business impact analysis for each identified crisis to assess the potential impact on our business operations, financial performance, technology and staff. The results of the business impact analysis have been utilized to develop management action plans that align business priorities, clarify responsibilities and establish processes and procedures that enable us to respond in a timely, proactive manner and take appropriate actions to manage and mitigate the potential disruptive impact of specified crises.

Our cybersecurity risk management efforts are a core component of our overall enterprise risk-management framework and CFC’s operational risk oversight. CFC’s cybersecurity efforts are an important element of our Business Technology Services Group. We have specific resources dedicated to cybersecurity, which enable our ability to measure, analyze and mitigate potential risks effectively. Efforts to further develop CFC’s cybersecurity risk management are benchmarked against industry best practice notwithstanding an environment that continues to evolve as new potential risks emerge. Cyber-related attacks pose a risk to the security of our members’ strategic business information and the confidentiality and integrity of our data, which include strategic and proprietary information. Because such an attack could have a material adverse impact on our operations, the CFC Board of Directors is actively engaged in the oversight of our continuous efforts in monitoring and managing the risks associated with the ever-evolving nature of cybersecurity threats. Each quarter, or more frequently as requested by the board of directors, management provides reports on CFC’s security operations, including any cybersecurity incidents, management’s efforts to promptly respond to and resolve such incidents, and any other related information requested from management. On at least an annual basis, the board of directors reviews management reports concerning the disclosure controls and procedures in place to enable CFC to make accurate and timely disclosures about any material cybersecurity events. Additionally, upon the occurrence of a material cybersecurity incident, the board of directors will be notified of the event so it may properly evaluate such incident, including management’s remediation plan.

NON-GAAP FINANCIAL MEASURES

Below we discuss each of the non-GAAP financial measures and provide a reconciliation of our non-GAAP financial measures to the most comparable U.S. GAAP financial measures. We believe our non-GAAP financial measures, which are not a substitute for U.S. GAAP and may not be consistent with similarly titled non-GAAP financial measures used by other companies, provide meaningful information and are useful to investors because management evaluates performance based on these metrics for purposes of (i) establishing performance goals; (ii) budgeting and forecasting; (iii) comparing period-to-period operating results, analyzing changes in results and identifying potential trends; and (iv) making compensation decisions. In addition, certain of the financial covenants in our committed bank revolving line of credit agreements and debt indentures are based on non-GAAP financial measures.

Statements of Operations Non-GAAP Financial Measures

One of our primary performance measures is TIER, which is a measure indicating our ability to cover the interest expense requirements on our debt. TIER is calculated by adding the interest expense to net income prior to the cumulative effect of change in accounting principle and dividing that total by the interest expense. We adjust the TIER calculation to add the derivative cash settlements expense to the interest expense and to remove the derivative forward value gains (losses) and foreign currency adjustments from total net income. Adding the cash settlements expense back to interest expense also has a corresponding effect on our adjusted net interest income.

We use derivatives to manage interest rate risk on our funding of the loan portfolio. The derivative cash settlements expense represents the amount that we receive from or pay to our counterparties based on the interest rate indexes in our derivatives that do not qualify for hedge accounting. We adjust the reported interest expense to include the derivative cash settlements expense. We use the adjusted cost of funding to set interest rates on loans to our members and believe that the interest expense adjusted to include derivative cash settlements expense represents our total cost of funding for the period. TIER, calculated by adding the derivative cash settlements expense to the interest expense, reflects management's perspective on our operations and, therefore, we believe that it represents a useful financial measure for investors.

The derivative forward value gains (losses) and foreign currency adjustments do not represent our cash inflows or outflows during the current period and, therefore, do not affect our current ability to cover our debt service obligations. The derivative forward value gains (losses) included in the derivative gains (losses) line of the statement of operations represents a present-value estimate of the future cash inflows or outflows that will be recognized as net cash settlements expense for all periods through the maturity of our derivatives that do not qualify for hedge accounting. We have not issued foreign-denominated debt since 2007, and as of May 31, 2023 and 2022, there were no foreign currency derivative instruments outstanding. For operational management and decision-making purposes, we subtract derivative forward value gains (losses) and foreign currency adjustments from our net income when calculating TIER and for other net income presentation purposes. In addition, since the derivative forward value gains (losses) and foreign currency adjustments do not represent current-period cash flows, we do not allocate such funds to our members and, therefore, exclude the derivative forward value gains (losses) and foreign currency adjustments from net income in calculating the amount of net income to be allocated to our members. TIER, calculated by excluding the derivative forward value gains (losses) and foreign currency adjustments from net income, reflects management's perspective on our operations and, therefore, we believe that it represents a useful financial measure for investors.

Total equity includes the noncash impact of derivative forward value gains (losses) and foreign currency adjustments recorded in net income. It also includes as a component of accumulated other comprehensive income the impact of changes in the fair value of derivatives designated as cash flow hedges as well as the remaining transition adjustment recorded when we adopted the accounting guidance that required all derivatives be recorded on the balance sheet at fair value. In evaluating our debt-to-equity ratio discussed further below, we make adjustments to equity similar to the adjustments made in calculating TIER. We exclude from total equity the cumulative impact of changes in derivative forward value gains (losses) and foreign currency adjustments and amounts included in accumulated other comprehensive income related to derivatives designated for cash flow hedge accounting and the remaining derivative transition adjustment to derive non-GAAP adjusted equity.

Net Income and Adjusted Net Income

Table 34 provides a reconciliation of adjusted interest expense, adjusted net interest income, adjusted total revenue and adjusted net income to the comparable U.S. GAAP measures. These adjusted measures are used in the calculation of our adjusted net interest yield and adjusted TIER for each fiscal year in the five-year period ended May 31, 2023.

Table 34: Adjusted Net Income

(Dollars in thousands)	Year Ended May 31,				
	2023	2022	2021	2020	2019
Adjusted net interest income:					
Interest income	\$ 1,351,729	\$ 1,141,243	\$ 1,116,601	\$ 1,151,286	\$ 1,135,670
Interest expense	(1,036,508)	(705,534)	(702,063)	(821,089)	(836,209)
Include: Derivative cash settlements interest income (expense) ⁽¹⁾	33,577	(101,385)	(115,645)	(55,873)	(43,611)
Adjusted interest expense	(1,002,931)	(806,919)	(817,708)	(876,962)	(879,820)
Adjusted net interest income	<u>\$ 348,798</u>	<u>\$ 334,324</u>	<u>\$ 298,893</u>	<u>\$ 274,324</u>	<u>\$ 255,850</u>
Adjusted total revenue:					
Net interest income	\$ 315,221	\$ 435,709	\$ 414,538	\$ 330,197	\$ 299,461
Fee and other income	18,134	17,193	18,929	22,961	15,355
Total revenue	333,355	452,902	433,467	353,158	314,816
Include: Derivative cash settlements interest income (expense) ⁽¹⁾	33,577	(101,385)	(115,645)	(55,873)	(43,611)
Adjusted total revenue	<u>\$ 366,932</u>	<u>\$ 351,517</u>	<u>\$ 317,822</u>	<u>\$ 297,285</u>	<u>\$ 271,205</u>
Adjusted net income:					
Net income (loss)	\$ 501,587	\$ 798,537	\$ 813,978	\$ (589,430)	\$ (151,210)
Exclude: Derivative forward value gains (losses) ⁽²⁾	252,267	557,867	621,946	(734,278)	(319,730)
Adjusted net income	<u>\$ 249,320</u>	<u>\$ 240,670</u>	<u>\$ 192,032</u>	<u>\$ 144,848</u>	<u>\$ 168,520</u>

⁽¹⁾Represents the net periodic contractual interest expense amount on our interest rate swaps during the reporting period.

⁽²⁾Represents the change in fair value of our interest rate swaps during the reporting period due to changes in expected future interest rates over the remaining life of our derivative contracts.

We primarily fund our loan portfolio through the issuance of debt. However, we use derivatives as economic hedges as part of our strategy to manage the interest rate risk associated with funding our loan portfolio. We therefore consider the interest expense incurred on our derivatives to be part of our funding cost in addition to the interest expense on our debt. As such, we add net periodic derivative cash settlements interest expense amounts to our reported interest expense to derive our adjusted interest expense and adjusted net interest income. We exclude unrealized derivative forward value gains and losses from our adjusted total revenue and adjusted net income.

TIER and Adjusted TIER

Table 35 displays the calculation of our TIER and adjusted TIER for each fiscal year in the five-year period ended May 31, 2023.

Table 35: TIER and Adjusted TIER

	Year Ended May 31,				
	2023	2022	2021	2020	2019
TIER ⁽¹⁾	1.48	2.13	2.16	0.28	0.82
Adjusted TIER ⁽²⁾	<u>1.25</u>	<u>1.30</u>	<u>1.23</u>	<u>1.17</u>	<u>1.19</u>

(1) TIER is calculated based on our net income (loss) plus interest expense for the period divided by interest expense for the period.

(2) Adjusted TIER is calculated based on adjusted net income (loss) plus adjusted interest expense for the period divided by adjusted interest expense for the period.

Liabilities and Equity and Adjusted Liabilities and Equity

Management relies on the adjusted debt-to-equity ratio as a key measure in managing our business. We therefore believe that this adjusted measure, in combination with the comparable U.S. GAAP financial measure, is useful to investors in evaluating our financial condition. We adjust the comparable U.S. GAAP financial measure to:

- exclude debt used to fund loans that are guaranteed by RUS from total liabilities;
- exclude from total liabilities, and add to total equity, debt with equity characteristics issued to our members and in the capital markets; and
- exclude the noncash impact of derivative financial instruments and foreign currency adjustments from total liabilities and total equity.

We are an eligible lender under an RUS loan guarantee program. Loans issued under this program carry the U.S. government's guarantee of all interest and principal payments. We have little or no risk associated with the collection of principal and interest payments on these loans. Therefore, we believe there is little or no risk related to the repayment of the liabilities used to fund RUS-guaranteed loans and we subtract such liabilities from total liabilities to calculate our adjusted debt-to-equity ratio.

Members may be required to purchase subordinated certificates as a condition of membership and as a condition to obtaining a loan or guarantee. The subordinated certificates are accounted for as debt under U.S. GAAP. The subordinated certificates have long-dated maturities and pay no interest or pay interest that is below market, and under certain conditions we are prohibited from making interest payments to members on the subordinated certificates. For computing our adjusted debt-to-equity ratio we subtract members' subordinated certificates from total liabilities and add members' subordinated certificates to total equity.

We also sell subordinated deferrable debt in the capital markets with maturities of up to 30 years and the option to defer interest payments. The characteristics of subordination, deferrable interest and long-dated maturity are all equity characteristics. In calculating our adjusted debt-to-equity ratio, we subtract subordinated deferrable debt from total liabilities and add it to total equity.

We record derivative instruments at fair value on our consolidated balance sheets. For computing our adjusted debt-to-equity ratio we exclude the noncash impact of our derivative accounting from liabilities and equity. Also, for computing our adjusted debt-to-equity ratio we exclude the impact of foreign currency valuation adjustments from liabilities and equity. The debt-to-equity ratio adjusted to exclude the effect of foreign currency translation reflects management's perspective on our operations and, therefore, we believe is a useful financial measure for investors.

Table 36 provides a reconciliation between our total liabilities and total equity and the adjusted amounts used in the calculation of our adjusted debt-to-equity ratio as of the end of each fiscal year in the five-year period ended May 31, 2023. As indicated in Table 36, subordinated debt is treated in the same manner as equity in calculating our adjusted debt-to-equity ratio.

Table 36: Adjusted Liabilities and Equity

(Dollars in thousands)	May 31,				
	2023	2022	2021	2020	2019
Adjusted total liabilities:					
Total liabilities	\$31,422,811	\$29,109,413	\$28,238,484	\$27,508,783	\$25,820,490
Exclude:					
Derivative liabilities	115,074	128,282	584,989	1,258,459	391,724
Debt used to fund loans guaranteed by RUS	122,873	131,128	139,136	146,764	153,991
Subordinated deferrable debt	1,283,436	986,518	986,315	986,119	986,020
Subordinated certificates	1,223,126	1,234,161	1,254,660	1,339,618	1,357,129
Adjusted total liabilities	<u>\$28,678,302</u>	<u>\$26,629,324</u>	<u>\$25,273,384</u>	<u>\$23,777,823</u>	<u>\$22,931,626</u>
Adjusted total equity:					
Total equity	\$ 2,589,249	\$ 2,141,969	\$ 1,399,879	\$ 648,822	\$ 1,303,882
Exclude:					
Prior fiscal year-end cumulative derivative forward value gains (losses) ⁽¹⁾	90,831	(467,036)	(1,088,982)	(354,704)	(34,974)
Year-to-date derivative forward value gains (losses) ⁽¹⁾	252,267	557,867	621,946	(734,278)	(319,730)
Period-end cumulative derivative forward value gains (losses) ⁽¹⁾	343,098	90,831	(467,036)	(1,088,982)	(354,704)
AOCI attributable to derivatives ⁽²⁾	1,001	1,341	1,718	2,130	2,571
Subtotal	344,099	92,172	(465,318)	(1,086,852)	(352,133)
Include:					
Subordinated deferrable debt	1,283,436	986,518	986,315	986,119	986,020
Subordinated certificates	1,223,126	1,234,161	1,254,660	1,339,618	1,357,129
Subtotal	2,506,562	2,220,679	2,240,975	2,325,737	2,343,149
Adjusted total equity	<u>\$ 4,751,712</u>	<u>\$ 4,270,476</u>	<u>\$ 4,106,172</u>	<u>\$ 4,061,411</u>	<u>\$ 3,999,164</u>

⁽¹⁾ Represents consolidated total derivative forward value gains (losses).

⁽²⁾ Represents the AOCI amount related to derivatives. See “Note 11—Equity” for the additional components of AOCI.

Debt-to-Equity and Adjusted Debt-to-Equity Ratios

Table 37 displays the calculations of our debt-to-equity and adjusted debt-to-equity ratios as of the end of each fiscal year during the five-year period ended May 31, 2023.

Table 37: Debt-to-Equity Ratio and Adjusted Debt-to-Equity Ratio

(Dollars in thousands)	May 31,				
	2023	2022	2021	2020	2019
Debt-to-equity ratio:					
Total liabilities	\$31,422,811	\$ 29,109,413	\$28,238,484	\$27,508,783	\$25,820,490
Total equity	2,589,249	2,141,969	1,399,879	648,822	1,303,882
Debt-to-equity ratio ⁽¹⁾	12.14	13.59	20.17	42.40	19.80
Adjusted debt-to-equity ratio:					
Adjusted total liabilities ⁽²⁾	\$28,678,302	\$ 26,629,324	\$25,273,384	\$23,777,823	\$22,931,626
Adjusted total equity ⁽²⁾	4,751,712	4,270,476	4,106,172	4,061,411	3,999,164
Adjusted debt-to-equity ratio ⁽³⁾	6.04	6.24	6.15	5.85	5.73

⁽¹⁾ Calculated based on total liabilities at period-end divided by total equity at period-end.

⁽²⁾ See Table 36 above for details on the calculation of these non-GAAP financial measures and the reconciliation to the most comparable U.S. GAAP financial measures.

⁽³⁾ Calculated based on adjusted total liabilities at period-end divided by adjusted total equity at period-end.

Total CFC Equity and Members' Equity

Members' equity excludes the noncash impact of derivative forward value gains (losses) and foreign currency adjustments recorded in net income and amounts recorded in accumulated other comprehensive income. Because these amounts generally have not been realized, they are not available to members and are excluded by the CFC Board of Directors in determining the annual allocation of adjusted net income to patronage capital, to the members' capital reserve and to other member funds. Table 38 provides a reconciliation of members' equity to total CFC equity as of May 31, 2023 and 2022. We present the components of accumulated other comprehensive income in "Note 11—Equity."

Table 38: Members' Equity

(Dollars in thousands)	May 31,	
	2023	2022
Members' equity:		
Total CFC equity	\$ 2,562,059	\$ 2,114,573
Exclude:		
Accumulated other comprehensive income	8,343	2,258
Period-end cumulative derivative forward value gains attributable to CFC ⁽¹⁾	342,624	92,363
Subtotal	350,967	94,621
Members' equity	\$ 2,211,092	\$ 2,019,952

⁽¹⁾ Represents period-end cumulative derivative forward value gains for CFC only, as total CFC equity does not include the noncontrolling interests of the variable interest entities NCSC and RTFC, which we are required to consolidate. We report the separate results of operations for CFC in "Note 16—Business Segments." The period-end cumulative derivative forward value total gain amounts as of May 31, 2023 and 2022 are presented above in Table 36.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

For quantitative and qualitative disclosures about market risk, see "Item 7. MD&A—Market Risk" and "MD&A—Consolidated Results of Operations—Non-Interest Income—Derivatives Gains (Losses)" and also "Note 10—Derivative Instruments and Hedging Activities" in this Report.

Item 8. Financial Statements and Supplementary Data

	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID 185)	83
Consolidated Statements of Operations for the Years Ended May 31, 2023, 2022 and 2021	86
Consolidated Statements of Comprehensive Income for the Years Ended May 31, 2023, 2022 and 2021	87
Consolidated Balance Sheets as of May 31, 2023 and 2022	88
Consolidated Statements of Changes in Equity for the Years Ended May 31, 2023, 2022 and 2021	89
Consolidated Statements of Cash Flows for the Years Ended May 31, 2023, 2022 and 2021	90
Notes to Consolidated Financial Statements	92
Note 1 — Summary of Significant Accounting Policies	92
Note 2 — Interest Income and Interest Expense	102
Note 3 — Investment Securities	102
Note 4 — Loans	104
Note 5 — Allowance for Credit Losses	117
Note 6 — Short-Term Borrowings	119
Note 7 — Long-Term Debt	120
Note 8 — Subordinated Deferrable Debt	123
Note 9 — Members’ Subordinated Certificates	124
Note 10 — Derivative Instruments and Hedging Activities	126
Note 11 — Equity	130
Note 12 — Employee Benefits	133
Note 13 — Guarantees	134
Note 14 — Fair Value Measurement	136
Note 15 — Variable Interest Entities	140
Note 16 — Business Segments	142

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Members
National Rural Utilities Cooperative Finance Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of National Rural Utilities Cooperative Finance Corporation and subsidiaries (the Company) as of May 31, 2023 and 2022, the related consolidated statements of operations, comprehensive income (loss), changes in equity, and cash flows for each of the years in the three-year period ended May 31, 2023, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of May 31, 2023 and 2022, and the results of its operations and its cash flows for each of the years in the three-year period ended May 31, 2023, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which they relate.

Assessment of the allowance for credit losses of loans evaluated on a collective basis

As discussed in Notes 1 and 5 to the consolidated financial statements, the Company's allowance for credit losses for loans evaluated on a collective basis (the collective ACL) was \$27.3 million as of May 31, 2023. The collective ACL includes the measure of expected credit losses on a collective (pool) basis for those loans that share similar risk characteristics. The Company estimates the collective ACL using a probability of default (PD) and loss given default (LGD) methodology. The Company segments its loan portfolio into pools based on member borrower type, which is based on the utility sector of the borrower, and further by internal borrower risk ratings. The Company then applies loss factors, consisting of the PD and LGD, to the scheduled loan-level amortization amounts over the life of the loans.

Due to a limited history of defaults in the portfolio, the Company utilizes third-party default data tables for the utility sector as a proxy to estimate default rates for each of the pools. Based on the mapping of internal borrower risk rating to equivalent credit rating provided in the third-party utility default tables, the Company applies corresponding cumulative default rates to the scheduled loan amortization amounts over the remaining life of loan in each of the pools. For estimation of an LGD the Company utilizes its lifetime historical loss experience for each of the portfolio segments. The Company estimates that, based on historical experience, expected credit losses will not be affected by changes in economic factors and therefore, the Company has not made adjustments to the historical rates for any economic forecasts. The Company considers the need to adjust the historical loss information for differences in the specific characteristics of its existing loan portfolio based on an evaluation of relevant qualitative factors, such as differences in the composition of the loan portfolio, underwriting standards, problem loan trends, the quality of the Company's credit review functions, the regulatory environment and other pertinent external factors.

We identified the assessment of the collective ACL as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment of the collective ACL due to significant measurement uncertainty. Specifically, the assessment encompassed the evaluation of the collective ACL methodology, portfolio segmentation, and the method used to estimate the PD and LGD and their significant assumptions, including third-party proxy default data for the utility sector, and borrower risk ratings. The assessment also included an evaluation of the conceptual soundness of the collective ACL methodology. In addition, auditor judgment was required to evaluate the sufficiency of audit evidence obtained.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design of certain internal controls related to the Company's measurement of the collective ACL estimate, including controls over the:

- development of the collective ACL methodology
- continued use and appropriateness of the method and significant assumptions used to develop the PD and LGD
- analysis of credit quality trends and ratios.

We evaluated the Company's process to develop the collective ACL estimate by testing certain sources of data, factors, and assumptions that the Company used, and considered the relevance and reliability of such data, factors, and assumptions. In addition, we involved credit risk professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's collective ACL methodology for compliance with U.S. generally accepted accounting principles
- evaluating the conceptual soundness and the judgments made by the Company relative to the assessment of the PD and LGD by comparing them to relevant Company-specific metrics and trends and the applicable industry and regulatory practices
- determining whether the loan portfolio is segmented by similar risk characteristics by comparing to the Company's business environment and relevant industry practices
- testing individual borrower risk ratings for a selection of borrowers by evaluating the financial performance of the borrower, sources of repayment, and any relevant guarantees or underlying collateral
- evaluating the appropriateness of mapping an alignment of internal borrower risk ratings to equivalent credit ratings provided in the third-party utility default table.

[Table of Contents](#)

We also assessed sufficiency of the audit evidence obtained related to the collective ACL estimate by evaluating the:

- cumulative results of the audit procedures
- qualitative aspects of the Company's accounting practices
- potential bias in the accounting estimates.

/s/ KPMG LLP

We have served as the Company's auditor since 2013.

McLean, Virginia

August 2, 2023

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS**

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Interest income	\$ 1,351,729	\$ 1,141,243	\$ 1,116,601
Interest expense	(1,036,508)	(705,534)	(702,063)
Net interest income	315,221	435,709	414,538
Benefit (provision) for credit losses	(603)	17,972	(28,507)
Net interest income after benefit (provision) for credit losses	314,618	453,681	386,031
Non-interest income:			
Fee and other income	18,134	17,193	18,929
Derivative gains	285,844	456,482	506,301
Investment securities losses	(4,974)	(30,179)	1,495
Total non-interest income	299,004	443,496	526,725
Non-interest expense:			
Salaries and employee benefits	(59,011)	(51,863)	(55,258)
Other general and administrative expenses	(50,620)	(43,323)	(39,447)
Losses on early extinguishment of debt	(117)	(754)	(1,456)
Other non-interest expense	(1,487)	(1,552)	(1,619)
Total non-interest expense	(111,235)	(97,492)	(97,780)
Income before income taxes	502,387	799,685	814,976
Income tax provision	(800)	(1,148)	(998)
Net income	501,587	798,537	813,978
Less: Net income attributable to noncontrolling interests	(97)	(2,692)	(2,311)
Net income attributable to CFC	\$ 501,490	\$ 795,845	\$ 811,667

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Net income	\$ 501,587	\$ 798,537	\$ 813,978
Other comprehensive income:			
Changes in unrealized gains on derivative cash flow hedges	6,691	4,028	—
Reclassification to earnings of realized gains on derivatives	(712)	(623)	(412)
Defined benefit plan adjustments	106	(1,122)	2,297
Other comprehensive income	6,085	2,283	1,885
Total comprehensive income	507,672	800,820	815,863
Less: Total comprehensive income attributable to noncontrolling interests	(97)	(2,692)	(2,311)
Total comprehensive income attributable to CFC	\$ 507,575	\$ 798,128	\$ 813,552

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONSOLIDATED BALANCE SHEETS**

(Dollars in thousands)	May 31,	
	2023	2022
Assets:		
Cash and cash equivalents	\$ 198,936	\$ 153,551
Restricted cash	8,301	7,563
Total cash, cash equivalents and restricted cash	207,237	161,114
Investment securities:		
Debt securities trading, at fair value	474,875	566,146
Equity securities, at fair value	35,494	33,758
Total investment securities, at fair value	510,369	599,904
Loans to members	32,532,086	30,063,386
Less: Allowance for credit losses	(53,094)	(67,560)
Loans to members, net	32,478,992	29,995,826
Accrued interest receivable	172,723	111,418
Other receivables	31,243	35,431
Fixed assets, net	86,011	101,762
Derivative assets	460,762	222,042
Other assets	64,723	23,885
Total assets	\$ 34,012,060	\$ 31,251,382
Liabilities:		
Accrued interest payable	\$ 212,340	\$ 131,950
Debt outstanding:		
Short-term borrowings	4,546,275	4,981,167
Long-term debt	23,946,548	21,545,440
Subordinated deferrable debt	1,283,436	986,518
Members' subordinated certificates:		
Membership subordinated certificates	628,614	628,603
Loan and guarantee subordinated certificates	348,349	365,388
Member capital securities	246,163	240,170
Total members' subordinated certificates	1,223,126	1,234,161
Total debt outstanding	30,999,385	28,747,286
Deferred income	38,601	44,332
Derivative liabilities	115,074	128,282
Other liabilities	57,411	57,563
Total liabilities	31,422,811	29,109,413
Equity:		
CFC equity:		
Retained equity	2,553,716	2,112,315
Accumulated other comprehensive income	8,343	2,258
Total CFC equity	2,562,059	2,114,573
Noncontrolling interests	27,190	27,396
Total equity	2,589,249	2,141,969
Total liabilities and equity	\$ 34,012,060	\$ 31,251,382

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY**

(Dollars in thousands)	Membership Fees and Educational Fund	Patronage Capital Allocated	Members' Capital Reserve	Unallocated Net Income (Loss)	CFC Retained Equity	Accumulated Other Comprehensive Income (Loss)	Total CFC Equity	Non- controlling Interests	Total Equity
Balance as of May 31, 2020	\$ 3,193	\$ 894,066	\$ 807,320	\$(1,076,548)	\$ 628,031	\$ (1,910)	\$ 626,121	\$ 22,701	\$ 648,822
Cumulative effect from adoption of new accounting standard	—	—	—	(3,900)	(3,900)	—	(3,900)	—	(3,900)
Balance as of June 1, 2020	3,193	894,066	807,320	(1,080,448)	624,131	(1,910)	622,221	22,701	644,922
Net income	900	89,761	102,429	618,577	811,667	—	811,667	2,311	813,978
Other comprehensive income	—	—	—	—	—	1,885	1,885	—	1,885
Patronage capital retirement	—	(59,857)	—	—	(59,857)	—	(59,857)	(2,054)	(61,911)
Other	(968)	—	—	—	(968)	—	(968)	1,973	1,005
Balance as of May 31, 2021	\$ 3,125	\$ 923,970	\$ 909,749	\$ (461,871)	\$1,374,973	\$ (25)	\$1,374,948	\$ 24,931	\$1,399,879
Net income	1,200	88,583	152,537	553,525	795,845	—	795,845	2,692	798,537
Other comprehensive income	—	—	—	—	—	2,283	2,283	—	2,283
Patronage capital retirement	—	(57,565)	—	—	(57,565)	—	(57,565)	(2,414)	(59,979)
Other	(938)	—	—	—	(938)	—	(938)	2,187	1,249
Balance as of May 31, 2022	\$ 3,387	\$ 954,988	\$1,062,286	\$ 91,654	\$2,112,315	\$ 2,258	\$2,114,573	\$ 27,396	\$2,141,969
Net income	1,100	110,273	139,856	250,261	501,490	—	501,490	97	501,587
Other comprehensive income	—	—	—	—	—	6,085	6,085	—	6,085
Patronage capital retirement	—	(59,136)	—	—	(59,136)	—	(59,136)	(2,704)	(61,840)
Other	(953)	(10)	10	—	(953)	—	(953)	2,401	1,448
Balance as of May 31, 2023	<u>\$ 3,534</u>	<u>\$1,006,115</u>	<u>\$1,202,152</u>	<u>\$ 341,915</u>	<u>\$2,553,716</u>	<u>\$ 8,343</u>	<u>\$2,562,059</u>	<u>\$ 27,190</u>	<u>\$2,589,249</u>

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Cash flows from operating activities:			
Net income	\$ 501,587	\$ 798,537	\$ 813,978
Adjustments to reconcile net income to net cash provided by operating activities:			
Amortization of deferred loan fees	(7,500)	(8,211)	(9,390)
Amortization of debt issuance costs and discount	28,744	27,417	26,967
Amortization of guarantee fee	19,300	18,763	18,687
Depreciation and amortization	5,717	7,553	7,959
Provision (benefit) for credit losses	603	(17,972)	28,507
Loss on early extinguishment of debt	117	754	1,456
Unrealized (gains) losses on equity and debt securities	1,090	28,742	(1,015)
Derivative forward value gains	(252,267)	(557,867)	(621,946)
Advances on loans held for sale	(213,142)	(214,486)	(125,500)
Proceeds from sales of loans held for sale	256,942	170,686	125,500
Changes in operating assets and liabilities:			
Accrued interest receivable	(61,305)	(3,562)	9,282
Accrued interest payable	80,390	8,278	(15,947)
Deferred income	1,769	1,345	1,285
Other	(24,272)	(9,184)	(19,868)
Net cash provided by operating activities	<u>337,773</u>	<u>250,793</u>	<u>239,955</u>
Cash flows from investing activities:			
Advances on loans held for investment, net	(2,534,642)	(1,592,447)	(1,724,253)
Investments in fixed assets, net	(7,721)	(17,727)	(9,862)
Purchase of trading securities	(117,288)	(181,545)	(397,522)
Proceeds from sales and maturities of trading securities	201,849	162,739	127,875
Proceeds from redemption of equity securities	—	—	30,000
Net cash used in investing activities	<u>(2,457,802)</u>	<u>(1,628,980)</u>	<u>(1,973,762)</u>
Cash flows from financing activities:			
Proceeds from (repayments of) short-term borrowings ≤ 90 days, net	(417,487)	270,405	808,252
Proceeds from short-term borrowings with original maturity > 90 days	2,864,699	2,693,256	3,081,069
Repayments of short-term borrowings with original maturity > 90 days	(2,882,104)	(2,564,590)	(3,269,210)
Payments for issuance costs for revolving bank lines of credit	(2,108)	(3,563)	—
Proceeds from issuance of long-term debt, net of discount and issuance costs	4,293,185	3,973,810	3,055,220
Payments for retirement of long-term debt	(1,916,514)	(3,054,366)	(2,186,458)
Payments made for early extinguishment of debt	—	(754)	(1,456)
Payments for issuance costs for subordinated deferrable debt	(3,295)	—	—
Proceeds from issuance of subordinated deferrable debt	300,000	—	—
Proceeds from issuance of members' subordinated certificates	6,133	1,364	14,292
Payments for retirement of members' subordinated certificates	(17,168)	(21,863)	(84,659)
Payments for retirement of patronage capital	(59,189)	(57,761)	(59,889)
Additions (repayments) for membership fees, net	—	2	(12)
Net cash provided by financing activities	<u>2,166,152</u>	<u>1,235,940</u>	<u>1,357,149</u>
Net increase (decrease) in cash, cash equivalents and restricted cash	<u>46,123</u>	<u>(142,247)</u>	<u>(376,658)</u>
Beginning cash, cash equivalents and restricted cash	<u>161,114</u>	<u>303,361</u>	<u>680,019</u>
Ending cash, cash equivalents and restricted cash	<u>\$ 207,237</u>	<u>\$ 161,114</u>	<u>\$ 303,361</u>

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS**

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Supplemental disclosure of cash flow information:			
Cash paid for interest	\$ 934,602	\$ 668,276	\$ 687,145
Cash paid for income taxes	335	3	219
Noncash financing and investing activities:			
Equity investment, at cost, obtained in exchange for loan held for investment	\$ 7,778	\$ —	\$ —

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NOTE 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company

National Rural Utilities Cooperative Finance Corporation (“CFC”) is a tax-exempt member-owned cooperative association incorporated under the laws of the District of Columbia in April 1969. CFC’s principal purpose is to provide its members with financing to supplement the loan programs of the Rural Utilities Service (“RUS”) of the United States Department of Agriculture (“USDA”). CFC makes loans to its rural electric members so they can acquire, construct and operate electric distribution systems, electric generation and transmission (“power supply”) systems and related facilities. CFC also provides its members with credit enhancements in the form of letters of credit and guarantees of debt obligations. As a cooperative, CFC is owned by and exclusively serves its membership, which consists of not-for-profit entities or subsidiaries or affiliates of not-for-profit entities.

National Cooperative Services Corporation (“NCSC”) is a taxable cooperative incorporated in 1981 in the District of Columbia as a member-owned cooperative association. NCSC’s principal purpose is to provide financing to members of CFC, entities eligible to be members of CFC and the for-profit and not-for-profit entities that are owned, operated or controlled by or provide significant benefit to certain members of CFC. NCSC’s membership consists of distribution systems, power supply systems and statewide and regional associations that are members of CFC. CFC is the primary source of funding for NCSC and manages NCSC’s business operations under a management agreement that is automatically renewable on an annual basis unless terminated by either party. NCSC pays CFC a fee and, in exchange, CFC reimburses NCSC for loan losses under a guarantee agreement. As a taxable cooperative, NCSC pays income tax based on its reported taxable income and deductions. NCSC is headquartered with CFC in Dulles, Virginia.

Rural Telephone Finance Cooperative (“RTFC”) is a taxable Subchapter T cooperative association originally incorporated in South Dakota in 1987 and reincorporated as a member-owned cooperative association in the District of Columbia in 2005. RTFC’s principal purpose is to provide financing for its rural telecommunications members and their affiliates. RTFC’s membership consists of a combination of not-for-profit and for-profit entities. CFC is the sole lender to and manages the business operations of RTFC through a management agreement that is automatically renewable on an annual basis unless terminated by either party. RTFC pays CFC a fee and, in exchange, CFC reimburses RTFC for loan losses under a guarantee agreement. As permitted under Subchapter T of the Internal Revenue Code, RTFC pays income tax based on its net income, excluding patronage-sourced earnings allocated to its patrons. RTFC is headquartered with CFC in Dulles, Virginia.

In April 2023 and June 2023, RTFC’s and NCSC’s members, respectively, approved the sale of RTFC’s business to NCSC. We intend to complete the consolidation of RTFC and NCSC over the next 12 months, subject to meeting certain closing conditions. As part of the consolidation, CFC intends to retire CFC’s allocated but unretired patronage capital to RTFC at a discount, which we expect to occur during the second quarter of fiscal year 2024, and subsequently, RTFC intends to retire the allocated but unretired patronage capital to its members at a discount.

Basis of Presentation and Use of Estimates

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States (“U.S. GAAP”). The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts and related disclosures during the period. Management’s most significant estimates and assumptions involve determining the allowance for credit losses. These estimates are based on information available as of the date of the consolidated financial statements. While management makes its best judgments, actual amounts or results could differ from these estimates.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Principles of Consolidation

These consolidated financial statements include the accounts of CFC and variable interest entities (“VIEs”) where CFC is the primary beneficiary. NCSC and RTFC are VIEs that are required to be consolidated by CFC. All intercompany balances and transactions have been eliminated. Unless stated otherwise, references to “we, “our” or “us” relate to CFC and its consolidated entities.

Variable Interest Entities

A VIE is an entity that has a total equity investment at risk that is not sufficient to finance its activities without additional subordinated financial support provided by another party, or where the group of equity holders does not have (i) the ability to make decisions about the entity’s activities that most significantly impact its economic performance; (ii) the obligation to absorb the entity’s expected losses; or (iii) the right to receive the entity’s expected residual returns.

NCSC and RTFC meet the definition of VIEs because they do not have sufficient equity investment at risk to finance their activities without additional financial support. When evaluating an entity for possible consolidation, we must determine whether or not we have a variable interest in the entity. If it is determined that we do not have a variable interest in the entity, no further analysis is required and we do not consolidate the entity. If we have a variable interest in the entity, we must evaluate whether we are the primary beneficiary based on an assessment of quantitative and qualitative factors. We are considered the primary beneficiary holder if we have a controlling financial interest in the VIE that provides (i) the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and (ii) the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We consolidate the results of NCSC and RTFC with CFC because CFC is the primary beneficiary holder.

Cash and Cash Equivalents

Cash, certificates of deposit due from banks and other investments with original maturities of less than 90 days are classified as cash and cash equivalents.

Restricted Cash

Restricted cash, which consists primarily of member funds held in escrow for certain specifically designed cooperative programs, totaled \$8 million as of both May 31, 2023 and 2022.

Investment Securities

Our investment securities portfolio consists of equity and debt securities. We record purchases and sales of securities on a trade-date basis. The accounting and measurement framework for investment securities differs depending on the security type and the classification. Equity securities are reported at fair value on our consolidated balance sheets with unrealized gains and losses recorded as a component of other non-interest income. All of our debt securities were classified as trading as of May 31, 2023 and 2022. Accordingly, we also report our debt securities at fair value on our consolidated balance sheets and record unrealized gains and losses as a component of non-interest income. Interest income is generally recognized over the contractual life of the securities based on the effective yield method.

Loans to Members

We originate loans to members and classify loans as held for investment or held for sale based on management’s intent and ability to sell or hold the loan for the foreseeable future or until maturity or payoff. Loans that we have the ability and intent to hold for the foreseeable future are classified as held for investment and are reported based on the unpaid principal balance, net of principal charge-offs, and deferred loan origination costs. Loans that we intend to sell or for which we do not have the ability and intent to hold for the foreseeable future are classified as held for sale and are recorded at the lower of

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

cost or fair value. These loan sales are made at par value, concurrently or within a short period of time with the closing of the loan or participation agreement.

Accrued Interest Receivable

Accrued interest receivable amounts generally represent three months or less of accrued interest on loans outstanding, investments and derivative instruments. As permitted by the Accounting Standards Codification (“ASC”) *Topic 326, Financial Instruments—Credit Losses*, the current expected credit loss (“CECL”) model, we elected to continue reporting accrued interest on loans separately on our consolidated balance sheets as a component of the line item accrued interest receivable rather than as a component of loans to members. Because our policy is to write off past-due accrued interest receivable in a timely manner, we elected not to measure an allowance for credit losses for accrued interest receivable on loans outstanding, which totaled \$133 million and \$94 million as of May 31, 2023 and 2022, respectively. We also elected to exclude accrued interest receivable from the credit quality disclosures required under CECL.

Interest Income

Interest income on performing loans is accrued and recognized as interest income based on the contractual rate of interest. Deferred loan origination costs are amortized using the straight-line method, which approximates the effective interest method into interest income over the life of the loan. Nonrefundable loan fees that meet the definition of loan origination fees are deferred and generally recognized in interest income as yield adjustments over the period to maturity of the loan using the effective interest method.

Troubled Debt Restructurings

A loan modification is considered a troubled debt restructuring (“TDR”) if the borrower is experiencing financial difficulties and a concession is granted to the borrower that we would not otherwise consider. Under CECL, we are required to estimate an allowance for lifetime expected credit losses for the loans in our portfolio, including TDR loans. As discussed below under “Allowance for Credit Losses—Loan Portfolio—Asset-Specific Allowance,” TDR loans are evaluated on an individual basis in estimating expected credit losses. Credit losses for anticipated TDRs are accounted for similarly to TDRs and are identified when there is a reasonable expectation that a TDR will be executed with the borrower and when we expect the modification to affect the timing or amount of payments and/or the payment term.

We generally classify TDR loans as nonperforming and place the loan on nonaccrual status, although in many cases such loans were already classified as nonperforming prior to modification. These loans may be returned to performing status and the accrual of interest resumed if the borrower performs under the modified terms for an extended period of time, and we expect the borrower to continue to perform in accordance with the modified terms. In certain limited circumstances in which a TDR loan is current at the modification date, the loan may remain on accrual status at the time of modification.

Nonperforming Loans

We classify loans as nonperforming when contractual principal or interest is 90 days past due or when we believe the collection of principal and interest in full is not reasonably assured. When a loan is classified as nonperforming, we generally place the loan on nonaccrual status. Interest accrued but not collected at the date a loan is placed on nonaccrual status is reversed against current-period interest income. Interest income on nonaccrual loans is subsequently recognized only upon the receipt of cash payments. However, if we believe the ultimate collectability of the loan principal is in doubt, cash received is applied against the principal balance of the loan. Nonaccrual loans generally are returned to accrual status when principal and interest becomes and remains current for a specified period and repayment of the remaining contractual principal and interest is reasonably assured.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Charge-Offs

We charge off loans or a portion of a loan when we determine that the loan is uncollectible. The charge-off of uncollectible principal amounts results in a reduction to the allowance for credit losses for our loan portfolio. Recoveries of previously charged off principal amounts result in an increase to the allowance.

Allowance for Credit Losses—Loan Portfolio

Allowance Methodology

The allowance for credit losses is determined based on management's current estimate of expected credit losses over the remaining contractual term, adjusted as appropriate for estimated prepayments, of loans in our loan portfolio as of each balance sheet date. The allowance for credit losses for our loan portfolio is reported on our consolidated balance sheet as a valuation account that is deducted from loans to members to present the net amount we expect to collect over the life of our loans. We immediately recognize an allowance for expected credit losses upon origination of a loan. Adjustments to the allowance each period for changes in our estimate of lifetime expected credit losses are recognized in earnings through the provision for credit losses presented on our consolidated statements of operations.

We estimate our allowance for lifetime expected credit losses for our loan portfolio using a probability of default/loss given default methodology. Our allowance for credit losses consists of a collective allowance and an asset-specific allowance. The collective allowance is established for loans in our portfolio that share similar risk characteristics and are therefore evaluated on a collective, or pool, basis in measuring expected credit losses. The asset-specific allowance is established for loans in our portfolio that do not share similar risk characteristics with other loans in our portfolio and are therefore evaluated on an individual basis in measuring expected credit losses. Expected credit losses are estimated based on historical experience, current conditions and forecasts, if applicable, that affect the collectibility of the reported amount.

Since inception in 1969, CFC has experienced limited defaults and losses as the utility sector generally tends to be less sensitive to changes in the economy than other sectors largely due to the essential nature of the service provided. The losses we have incurred were not tied to economic factors, but rather to distinct operating issues related to each borrower. Given that our borrowers' creditworthiness, and accordingly our loss experience, has not correlated to specific underlying macroeconomic variables, such as U.S. unemployment rates or gross domestic product ("GDP") growth, we have not made adjustments to our historical loss rates for any economic forecast. We consider the need, however, to adjust our historical loss information for differences in the specific characteristics of our existing loan portfolio based on an evaluation of relative qualitative factors, such as differences in the composition of our loan portfolio, our underwriting standards, problem loan trends, the quality of our credit review function, as well as changes in the regulatory environment and other pertinent external factors that may impact the amount of future credit losses.

Collective Allowance

We employ a quantitative methodology and a qualitative framework to measure the collective component of our allowance for expected credit losses. The first element in our quantitative methodology involves the segmentation of our loan portfolio into loan pools that share similar risk characteristics. We disaggregate our loan portfolio into segments that reflect the member borrower type, which is based on the utility sector of the borrower because the key operational, infrastructure, regulatory, environmental, customer and financial risks of each sector are similar in nature. Our primary member borrower types consist of CFC electric distribution, CFC electric power supply, CFC statewide and associate, NCSC and RTFC telecommunications. Our portfolio segments align with the sectors generally seen in the utilities industry. We further stratify each portfolio into loan pools based on our internal borrower risk ratings, as our borrower risk ratings provide important information on the collectibility of each of our loan portfolio segments. We then apply loss factors, consisting of the probability of default and loss given default, to the scheduled loan-level amortization amounts over the life of the loans for each of our loan pools. Below we discuss the source and basis for the key inputs, which include borrower risk ratings and the loss factors, in measuring expected credit losses for our loan portfolio.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

- *Borrower Risk Ratings:* We evaluate each borrower and loan facility in our loan portfolio and assign internal borrower and loan facility risk ratings based on consideration of a number of quantitative and qualitative factors. Each risk rating is reassessed annually following receipt of the borrower's audited financial statements; however, interim risk-rating adjustments may occur as a result of updated information affecting a borrower's ability to fulfill its obligations or other significant developments and trends. Our internally assigned borrower risk ratings are intended to assess the general creditworthiness of the borrower and probability of default. We use our internal borrower risk ratings, which we map to the equivalent credit ratings by external rating agencies, to differentiate risk within each of our portfolio segments and loan pools. We provide additional information on our borrower risk ratings below in "Note 4—Loans."
- *Probability of Default:* The probability of default, or default rate, represents the likelihood that a borrower will default over a particular time horizon. Because of our limited default history, we utilize third-party default data for the utility sector as a proxy to estimate default rates for each of our loan pools. The third-party default data provide historical default rates, based on credit ratings and remaining maturities of outstanding bonds, for the utility sector. Based on the mapping and alignment of our internal borrower risk ratings to equivalent credit ratings provided in the third-party utility default table, we apply the corresponding cumulative default rates to the scheduled amortization amounts over the remaining term of the loans in each of our loan pools.
- *Loss Given Default:* The loss given default, or loss severity, represents the estimated loss, net of recoveries, on a loan that would be realized in the event of a borrower default. While we utilize third-party default data, we utilize our lifetime historical loss experience to estimate loss given default, or the recovery rate, for each of our loan portfolio segments. We believe our internal historical loss severity rates provide a more reliable estimate than third-party loss severity data due to the organizational structure and operating environment of rural utility cooperatives, our lending practice of generally requiring a senior security position on the assets and revenue of borrowers for long-term loans, the investment our member borrowers have in CFC and therefore the collaborative approach we generally take in working with members in the event that a default occurs.

In addition to the quantitative methodology used in our collective measurement of expected credit losses, management performs a qualitative evaluation and analyses of relevant factors, such as changes in risk-management practices, current and past underwriting standards, specific industry issues and trends and other subjective factors. Based on our assessment, we did not make a qualitative adjustment to the collective allowance for credit losses measured under our quantitative methodology as of May 31, 2023 or May 31, 2022.

Asset-Specific Allowance

We generally consider nonperforming loans as well as loans that have been or are anticipated to be modified under a troubled debt restructuring for individual evaluation given the risk characteristics of such loans. Factors we consider in measuring the extent of expected credit loss include the payment status, the collateral value, the borrower's financial condition, guarantor support, the probability of collecting scheduled principal and interest payments when due, anticipated modifications of payment structure or term for troubled borrowers, and recoveries if they can be reasonably estimated. We generally measure the expected credit loss as the difference between the amortized cost basis in the loan and the present value of the expected future cash flows from the borrower, which is generally discounted at the loan's effective interest rate, or the fair value of the collateral, if the loan is collateral dependent.

Unadvanced Loan Commitments

Unadvanced commitments represent amounts for which we have approved and executed loan contracts, but the funds have not been advanced. The majority of the unadvanced commitments reported represent amounts that are subject to material adverse change clauses at the time of the loan advance. Prior to making an advance on these facilities, we would confirm there has been no material adverse change in the business or condition, financial or otherwise, of the borrower since the time the loan was approved and confirm the borrower is currently in compliance with loan terms and conditions. The remaining unadvanced commitments relate to line of credit loans that are not subject to a material adverse change clause at the time of

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

each loan advance. As such, we would be required to advance amounts on these committed facilities as long as the borrower is in compliance with the terms and conditions of the loan commitment.

Unadvanced loan commitments related to line of credit loans are typically for periods not to exceed five years and are generally revolving facilities used for working capital and backup liquidity purposes. Historically, we have experienced a very low utilization rate on line of credit loan facilities, whether or not there is a material adverse change clause. Since we generally do not charge a fee on the unadvanced portion of the majority of our loan facilities, our borrowers will typically request long-term facilities to fund construction work plans and other capital expenditures for periods of up to five years and draw down on the facility over that time. These factors contribute to our expectation that the majority of the unadvanced line of credit loan commitments will expire without being fully drawn upon and that the total unadvanced amount does not necessarily represent future cash funding requirements.

Reserve for Credit Losses—Off-Balance Sheet Credit Exposures

We also maintain a reserve for credit losses for our off-balance sheet credit exposures related to unadvanced loan commitments and financial guarantees. Because our business processes and credit risks associated with our off-balance sheet credit exposures are essentially the same as for our loans, we measure expected credit losses for our off-balance sheet exposures, after adjusting for the probability of funding these exposures, consistent with the methodology used for our funded outstanding exposures. We include the reserve for expected credit losses for our off-balance sheet credit exposures as a component of other liabilities on our consolidated balance sheets.

Fixed Assets

Fixed assets are recorded at cost less accumulated depreciation. We recognize depreciation expense for each category of our depreciable fixed assets on a straight-line basis over the estimated useful life, which ranges from three to 40 years. We recognized depreciation expense of \$5 million, \$8 million and \$8 million in the fiscal years ended May 31, 2023 (“fiscal year 2023”), May 31, 2022 (“fiscal year 2022”) and May 31, 2021 (“fiscal year 2021”), respectively. We perform a fixed assets impairment assessment annually or more frequently, whenever events or circumstances indicate that the carrying amount of the assets may not be recoverable. Based on our annual impairment assessment for fiscal years 2023 and 2022, management determined that there were no indicators of impairment of our fixed assets as of May 31, 2023 or May 31, 2022.

The following table displays the components of our fixed assets. Our headquarters facility in Loudoun County, Virginia, which is owned by CFC, is included as a component of building and building equipment.

Table 1.1: Fixed Assets

(Dollars in thousands)	May 31,	
	2023	2022
Building and building equipment	\$ 50,316	\$ 50,177
Furniture and fixtures	6,332	6,254
Computer software and hardware	80,201	55,101
Other	1,126	1,024
Depreciable fixed assets	137,975	112,556
Less: Accumulated depreciation	(77,508)	(73,258)
Net depreciable fixed assets	60,467	39,298
Land	23,796	23,796
Software development in progress	1,748	38,668
Fixed assets, net	\$ 86,011	\$ 101,762

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Cloud Computing Arrangements—Implementation Costs

Eligible implementation costs associated with cloud computing arrangements that are service contracts are capitalized and amortized over future periods. These costs are recorded at cost less accumulated amortization and are included in other assets on the consolidated balance sheets. We recognize amortization expense for these capitalized implementation costs on a straight-line basis over the term of the hosting arrangements related to the cloud computing service contracts when ready for the intended use, and we include it in other general and administrative expenses in the consolidated statements of operations. We perform an impairment assessment annually or more frequently, whenever events or circumstances indicate that the carrying amount for the capitalized implementation costs for cloud computing service contracts may not be recoverable. Based on our annual impairment assessment for fiscal year 2023 management determined that there were no indicators of impairment of our capitalized implementation costs for cloud computing service contracts as of May 31, 2023.

We had \$29 million of unamortized capitalized implementation costs for cloud computing service contracts as of May 31, 2023, which included accumulated amortization related to these costs of \$1 million and we recognized amortization expense of \$1 million in fiscal year 2023 for these costs.

Securities Sold Under Repurchase Agreements

We enter into repurchase agreements to sell investment securities. These transactions are accounted for as collateralized financing transactions and are recorded on our consolidated balance sheets as part of short-term borrowings at the amounts at which the securities were sold.

Debt

We report debt at cost net of unamortized issuance costs and discounts or premiums. Issuance costs, discounts and premiums are deferred and amortized into interest expense using the effective interest method or a method approximating the effective interest method over the legal maturity of each bond issue. Short-term borrowings consist of borrowings with an original contractual maturity of one year or less and do not include the current portion of long-term debt. Borrowings with an original contractual maturity of greater than one year are classified as long-term debt.

Derivative Instruments

We are an end user of derivative financial instruments and do not engage in derivative trading. We use derivatives, primarily interest rate swaps and Treasury rate locks, to manage interest rate risk. Derivatives may be privately negotiated contracts, which are often referred to as over-the-counter (“OTC”) derivatives, or they may be listed and traded on an exchange. We generally engage in OTC derivative transactions.

In accordance with the accounting standards for derivatives and hedging activities, we record derivative instruments at fair value as either a derivative asset or derivative liability on our consolidated balance sheets. We report derivative asset and liability amounts on a gross basis based on individual contracts, which does not take into consideration the effects of master netting agreements or collateral netting. Derivatives in a gain position are reported as derivative assets on our consolidated balance sheets, while derivatives in a loss position are reported as derivative liabilities. Accrued interest related to derivatives is reported on our consolidated balance sheets as a component of either accrued interest receivable or accrued interest payable.

If we do not elect hedge accounting treatment, changes in the fair value of derivative instruments, which consist of net accrued periodic derivative cash settlements expense and derivative forward value amounts, are recognized in our consolidated statements of operations under derivative gains (losses). If we elect hedge accounting treatment for derivatives, we formally document, designate and assess the effectiveness of the hedge relationship. Changes in the fair value of derivatives designated as qualifying cash flow hedges are recorded as a component of other comprehensive income (“OCI”)

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

and reclassified from accumulated other comprehensive income (“AOCI”) to earnings using the effective interest method over the term of the forecasted transaction.

We generally do not designate interest rate swaps, which represent the substantial majority of our derivatives, for hedge accounting. Accordingly, changes in the fair value of interest rate swaps are reported in our consolidated statements of operations under derivative gains (losses). Net periodic cash settlements expense related to interest rate swaps are classified as an operating activity in our consolidated statements of cash flows.

We typically designate Treasury rate locks as cash flow hedges of forecasted debt issuances or repricings. Changes in the fair value of Treasury locks designated as cash flow hedges are recorded as a component of OCI and reclassified from AOCI into interest expense when the forecasted transaction occurs.

Guarantee Liability

We maintain a guarantee liability that represents our contingent and noncontingent exposure related to guarantees and standby liquidity obligations associated with our members’ debt. The guarantee liability is included in the other liabilities line item on the consolidated balance sheet, and the provision for guarantee liability is reported in non-interest expense as a separate line item on the consolidated statement of operations.

The contingent portion of the guarantee liability represents management’s estimate of our exposure to losses within the guarantee portfolio. The methodology used to estimate the contingent guarantee liability is consistent with the methodology used to determine the allowance for credit losses under the CECL model.

We record a noncontingent guarantee liability for all new or modified guarantees. Our noncontingent guarantee liability represents our obligation to stand ready to perform over the term of our guarantees and liquidity obligations that we have entered into or modified since January 1, 2003. Our noncontingent obligation is estimated based on guarantee and liquidity fees charged for guarantees issued, which represents management’s estimate of the fair value of our obligation to stand ready to perform. The fees are deferred and amortized using the straight-line method into interest income over the term of the guarantee.

Fair Value Valuation Processes

We present certain financial instruments at fair value, including equity and debt securities, and derivatives. Fair value is defined as the price that would be received for an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date (also referred to as an exit price). We consider observable prices in the principal market in our valuations where possible. Fair value estimates were developed at the reporting date and may not necessarily be indicative of amounts that could ultimately be realized in a market transaction at a future date. With the exception of redeeming debt under early redemption provisions, terminating derivative instruments under early-termination provisions and allowing borrowers to prepay their loans, we held and intend to hold all financial instruments to maturity excluding common stock and preferred stock investments that have no stated maturity and our trading debt securities.

Fair Value Hierarchy

The fair value accounting guidance provides a three-level fair value hierarchy for classifying financial instruments. This hierarchy is based on the markets in which the assets or liabilities trade and whether the inputs to the valuation techniques used to measure fair value are observable or unobservable. Fair value measurement of a financial asset or liability is assigned a level based on the lowest level of any input that is significant to the fair value measurement in its entirety. The three levels of the fair value hierarchy are summarized below:

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2: Observable market-based inputs, other than quoted prices in active markets for identical assets or liabilities

Level 3: Unobservable inputs

The degree of management judgment involved in determining the fair value of a financial instrument is dependent upon the availability of quoted prices in active markets or observable market parameters. When quoted prices and observable data in active markets are not fully available, management's judgment is necessary to estimate fair value. Changes in market conditions, such as reduced liquidity in the capital markets or changes in secondary market activities, may reduce the availability and reliability of quoted prices or observable data used to determine fair value.

Membership Fees

Members are charged a one-time membership fee based on member class. CFC distribution system members, power supply system members and national associations of cooperatives pay a \$1,000 membership fee. CFC service organization members pay a \$200 membership fee and CFC associates pay a \$1,000 fee. RTFC voting members pay a \$1,000 membership fee and RTFC associates pay a \$100 fee. NCSC members pay a \$100 membership fee. Membership fees are accounted for as members' equity.

Financial Instruments with Off-Balance Sheet Risk

In the normal course of business, we are a party to financial instruments with off-balance sheet risk to meet the financing needs of our member borrowers. These financial instruments include committed lines of credit, standby letters of credit and guarantees of members' obligations.

Early Extinguishment of Debt

We redeem outstanding debt early from time to time to manage liquidity and interest rate risk. When we redeem outstanding debt early, we recognize a gain or loss related to the difference between the amount paid to redeem the debt and the net book value of the extinguished debt as a component of non-interest expense in the gain (loss).

Income Taxes

While CFC is exempt under Section 501(c)(4) of the Internal Revenue Code, it is subject to tax on unrelated business taxable income. NCSC is a taxable cooperative that pays income tax on the full amount of its reportable taxable income and allowable deductions. RTFC is a taxable cooperative under Subchapter T of the Internal Revenue Code and is not subject to income taxes on income from patronage sources that is allocated to its borrowers, as long as the allocation is properly noticed and at least 20% of the amount allocated is retired in cash prior to filing the applicable tax return.

The income tax benefit (expense) recorded in the consolidated statement of operations represents the income tax benefit (expense) at the applicable combined federal and state income tax rates resulting from a statutory tax rate. The federal statutory tax rate for both NCSC and RTFC was 21% for each of fiscal years 2023, 2022 and 2021. Substantially all of the income tax expense recorded in our consolidated statements of operations relates to NCSC. NCSC had a deferred tax asset of \$1 million as of both of May 31, 2023 and 2022, primarily arising from differences in the accounting and tax treatment for derivatives. We believe that it is more likely than not that the deferred tax assets will be realized through taxable earnings. RTFC had a deferred tax asset of \$8 million as of May 31, 2023, primarily arising from CFC's early retirement of its allocated but unretired patronage capital to RTFC at a discount as discussed above under "The Company" section. RTFC had a deferred tax asset of less than \$1 million as of May 31, 2022, primarily arising from net operating loss carryforwards. RTFC had a deferred asset valuation allowance of \$8 million and less than \$1 million as of May 31, 2023 and 2022, respectively, as we believe that it is more likely than not that the deferred tax assets will not be realized through taxable earnings.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

New Accounting Standards Adopted in Fiscal Year 2023

Reference Rate Reform

In March 2020, the Financial Accounting Standards Board (“FASB”) issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which provides temporary optional expedients and exceptions for applying U.S. GAAP on contracts, hedging relationships and other transactions subject to modification due to the expected discontinuance of the London Interbank Offered Rate (“LIBOR”) and other reference rate reform changes to ease the potential accounting and financial burdens related to the expected transition in market reference rates. This guidance permits entities to elect not to apply certain modification accounting requirements to contracts affected by reference rate transition, if certain criteria are met. An entity that makes this election would not be required to remeasure modified contracts at the modification date or reassess a previous accounting determination. The guidance was effective upon issuance on March 12, 2020, and was applicable through December 31, 2022. On December 21, 2022, the FASB issued ASU 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848*, which extends the period of time entities can utilize the reference rate reform relief guidance under ASU 2020-04 from December 31, 2022 to December 31, 2024. Upon issuance of ASU 2020-04, we elected to apply certain of the optional expedients for contract modifications to our financial instruments impacted by the LIBOR discontinuance. We continued to elect to apply various optional expedients for contract modifications to our financial instruments affected by the reference rate reform, as extended by ASU 2022-06, through June 30, 2023 when the transition from LIBOR to the new market reference rate was completed. The application of this guidance did not have a material impact on our consolidated financial statements.

New Accounting Standards Issued But Not Yet Adopted

Financial Instruments—Credit Losses, Troubled Debt Restructurings and Vintage Disclosures

In March 2022, the FASB issued Accounting Standards Update (“ASU”) 2022-02, *Financial Instruments—Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures*, which addresses and amends areas identified by the FASB as part of its post-implementation review of the accounting standard that introduced the CECL model. The amendments eliminate the accounting guidance for TDRs by creditors that have adopted the CECL model and enhance the disclosure requirements for loan refinancings and restructurings made with borrowers experiencing financial difficulty. In addition, the amendments require disclosure of current-period gross write-offs for financing receivables and net investment in leases by year of origination in the vintage disclosures. ASU 2022-02 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years for entities, such as CFC, that have adopted the CECL accounting standard. Early adoption, however, is permitted if an entity has adopted the CECL accounting standard. We adopted the guidance for our fiscal year beginning June 1, 2023. While the guidance resulted in expanded disclosures, it did not have a material impact on our consolidated results of operation, financial condition or liquidity from adoption of this accounting standard.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NOTE 2—INTEREST INCOME AND INTEREST EXPENSE

The following table displays the components of interest income, by interest-earning asset type, and interest expense, by debt product type, presented on our consolidated statements of operations for fiscal years 2023, 2022 and 2021.

Table 2.1: Interest Income and Interest Expense

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Interest income:			
Loans ⁽¹⁾	\$ 1,330,144	\$ 1,125,292	\$ 1,101,505
Investment securities	21,585	15,951	15,096
Total interest income	1,351,729	1,141,243	1,116,601
Interest expense: ⁽²⁾⁽³⁾			
Short-term borrowings ⁽⁴⁾	165,961	18,265	14,730
Long-term debt ⁽⁵⁾	763,700	581,748	581,292
Subordinated debt	106,847	105,521	106,041
Total interest expense	1,036,508	705,534	702,063
Net interest income	\$ 315,221	\$ 435,709	\$ 414,538

⁽¹⁾Includes loan conversion fees, which are generally deferred and recognized in interest income over the period to maturity using the effective interest method, late payment fees, commitment fees and net amortization of deferred loan fees and loan origination costs.

⁽²⁾Includes amortization of debt discounts and debt issuance costs, which are generally deferred and recognized as interest expense over the period to maturity using the effective interest method. Issuance costs related to dealer commercial paper, however, are recognized in interest expense immediately as incurred.

⁽³⁾Includes fees related to funding arrangements, such as up-front fees paid to banks participating in our committed bank revolving line of credit agreements. Based on the nature of the fees, the amount is either recognized immediately as incurred or deferred and recognized in interest expense ratably over the term of the arrangement.

⁽⁴⁾Short-term borrowings consist of interest expense paid for commercial paper, select notes, daily liquidity fund notes and secured borrowings under repurchase agreements.

⁽⁵⁾Long-term debt consists of interest expense paid for both long-term and short-term medium-term notes and Farmer Mac notes payable, and other long-term debt.

Deferred income reported on our consolidated balance sheets of \$39 million and \$44 million as of May 31, 2023 and 2022, respectively, consists primarily of deferred loan conversion fees that totaled \$30 million and \$37 million as of each respective date.

NOTE 3—INVESTMENT SECURITIES

Our investment securities portfolio consists of debt securities classified as trading and equity securities with readily determinable fair values. We therefore record changes in the fair value of our debt and equity securities in earnings and report these unrealized changes together with realized gains and losses from the sale of securities as a component of non-interest income in our consolidated statements of operations. For additional information on our investments in debt securities, see “Note 1—Summary of Significant Accounting Policies.”

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Debt Securities

Our debt securities portfolio, which is intended to serve as a supplemental source of liquidity, consists of certificates of deposit with maturities greater than 90 days, commercial paper, corporate debt securities, municipality debt securities, commercial mortgage-backed securities (“MBS”), foreign government debt securities and other asset-backed securities (“ABS”). Pursuant to our investment policy guidelines, all fixed-income debt securities, at the time of purchase, must be rated at least investment grade based on external credit ratings from at least two of the leading global credit rating agencies, when available, or the corresponding equivalent, when not available. Securities rated investment grade, that is those rated Baa3 or higher by Moody’s Investors Service (“Moody’s”) or BBB- or higher by S&P Global Inc. (“S&P”) or BBB- or higher by Fitch Ratings Inc. (“Fitch”), are generally considered by the rating agencies to be of lower credit risk than non-investment-grade securities.

The following table presents the composition of our investment debt securities portfolio and the fair value as of May 31, 2023 and 2022.

Table 3.1: Investments in Debt Securities, at Fair Value

(Dollars in thousands)	May 31,	
	2023	2022
Debt securities, at fair value:		
Commercial paper.....	\$ —	\$ 9,985
Corporate debt securities.....	401,367	487,172
Commercial Agency MBS ⁽¹⁾	7,237	7,815
U.S. state and municipality debt securities.....	27,300	27,778
Foreign government debt securities.....	974	967
Other ABS ⁽²⁾	37,997	32,429
Total debt securities trading, at fair value.....	\$ 474,875	\$ 566,146

⁽¹⁾Consists of securities backed by the Federal National Mortgage Association (“Fannie Mae”) and the Federal Home Loan Mortgage Corporation (“Freddie Mac”).

⁽²⁾Consists primarily of securities backed by auto lease loans, equipment-backed loans, auto loans and credit card loans.

We recognized net unrealized losses on our debt securities of \$3 million, \$27 million and \$3 million for the years ended May 31, 2023, 2022 and 2021, respectively.

We sold \$36 million of debt securities at fair value and recorded realized gains related to the sale of these securities of less than \$1 million for the year ended May 31, 2023. We sold \$5 million of debt securities at fair value and recorded realized gains on the sale of these securities of less than \$1 million for the year ended May 31, 2022. We sold \$6 million of debt securities at fair value and recorded realized losses on the sale of these securities of less than \$1 million for the year ended May 31, 2021.

Equity Securities

The following table presents the composition of our equity security holdings and the fair value as of May 31, 2023 and 2022.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 3.2: Investments in Equity Securities, at Fair Value

(Dollars in thousands)	May 31,	
	2023	2022
Equity securities, at fair value:		
Farmer Mac—Series C non-cumulative preferred stock	\$ 25,750	\$ 25,520
Farmer Mac—Class A common stock	9,744	8,238
Total equity securities, at fair value	\$ 35,494	\$ 33,758

We recognized net unrealized gains on our equity securities of \$2 million for the fiscal year ended May 31, 2023, net unrealized losses of \$1 million for the fiscal year ended May 31, 2022 and net unrealized gains of \$4 million for fiscal year ended May 31, 2021. These unrealized amounts are reported as a component of non-interest income on our consolidated statements of operations.

NOTE 4—LOANS

We segregate our loan portfolio into segments, by legal entity, based on the borrower member class, which consists of CFC distribution, CFC power supply, CFC statewide and associate, NCSC and RTFC. We offer both long-term and line of credit loans to our borrowers. Under our long-term loan facilities, a borrower may select a fixed interest rate or a variable interest rate at the time of each loan advance. Line of credit loans are revolving loan facilities and generally have a variable interest rate.

We offer loans under secured long-term facilities with terms generally up to 35 years and line of credit loans. Under secured long-term facilities, borrowers have the option of selecting a fixed or variable rate for a period of one to 35 years for each long-term loan advance. When a selected fixed interest rate term expires, the borrower may select another fixed-rate term or a variable rate. Line of credit loans are revolving loan facilities that typically have a variable interest rate and are generally unsecured. Collateral and security requirements for advances on loan commitments are identical to those required at the time of the initial loan approval.

Loans to Members

Loans to members consist of loans held for investment and loans held for sale. The outstanding amount of loans held for investment is recorded based on the unpaid principal balance, net of discounts, net charge-offs and recoveries, of loans and deferred loan origination costs. The outstanding amount of loans held for sale is recorded based on the lower of cost or fair value. The following table presents loans to members by legal entity, member class and loan type, as of May 31, 2023 and 2022.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 4.1: Loans to Members by Member Class and Loan Type

(Dollars in thousands)	May 31,			
	2023		2022	
	Amount	% of Total	Amount	% of Total
Member class:				
CFC:				
Distribution	\$ 25,437,077	78 %	\$ 23,844,242	79 %
Power supply	5,437,242	17	4,901,770	17
Statewide and associate	200,368	1	126,863	—
Total CFC	31,074,687	96	28,872,875	96
NCSC	956,874	3	710,878	2
RTFC	487,788	1	467,601	2
Total loans outstanding ⁽¹⁾	32,519,349	100	30,051,354	100
Deferred loan origination costs—CFC ⁽²⁾	12,737	—	12,032	—
Loans to members	\$ 32,532,086	100 %	\$ 30,063,386	100 %
Loan type:				
Long-term loans:				
Fixed rate	\$ 28,371,358	87 %	\$ 26,952,372	90 %
Variable rate	1,024,653	3	820,201	2
Total long-term loans	29,396,011	90	27,772,573	92
Lines of credit	3,123,338	10	2,278,781	8
Total loans outstanding ⁽¹⁾	32,519,349	100	30,051,354	100
Deferred loan origination costs—CFC ⁽²⁾	12,737	—	12,032	—
Loans to members	\$ 32,532,086	100 %	\$ 30,063,386	100 %

⁽¹⁾ Represents the unpaid principal balance, net of discounts, charge-offs and recoveries, of loans as of the end of each period.

⁽²⁾ Deferred loan origination costs are recorded on the books of CFC.

Loan Sales

We may transfer whole loans and participating interests to third parties. These transfers are typically made concurrently or within a short period of time with the closing of the loan sale or participation agreement at par value and meet the accounting criteria required for sale accounting. Therefore, we remove the transferred loans or participating interests from our consolidated balance sheets when control has been surrendered and recognize a gain or loss on the sale, if any. We retain a servicing performance obligation on the transferred loans and recognize related servicing fees on an accrual basis over the period for which servicing is provided, as we believe the servicing fee represents adequate compensation. Other than the servicing performance obligation, we have not retained any interest in the loans sold to date. In addition, we have no obligation to repurchase loans that are sold, except in the case of breaches of representations and warranties.

We sold CFC and NCSC loans, at par for cash, totaling \$257 million, \$171 million and \$126 million in fiscal years 2023, 2022 and 2021, respectively. We recorded immaterial losses on the sale of these loans attributable to the unamortized deferred loan origination costs associated with the transferred loans. We had no loans held for sale as of May 31, 2023. We had loans held for sale totaling \$44 million as of May 31, 2022 which were sold at par for cash subsequent to year-end.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Credit Concentration

Concentrations of credit may exist when a lender has large credit exposures to single borrowers, large credit exposures to borrowers in the same industry sector or engaged in similar activities or large credit exposures to borrowers in a geographic region that would cause the borrowers to be similarly impacted by economic or other conditions in the region. As a tax-exempt, member-owned finance cooperative, CFC's principal focus is to provide funding to its rural electric utility cooperative members to assist them in acquiring, constructing and operating electric distribution systems, power supply systems and related facilities.

Because we lend primarily to our rural electric utility cooperative members, we have had a loan portfolio subject to single-industry and single-obligor concentration risks since our inception in 1969. Loans outstanding to electric utility organizations of \$32,032 million and \$29,584 million as of May 31, 2023 and 2022, respectively, accounted for 99% and 98% of total loans outstanding as of each respective date. The remaining loans outstanding in our portfolio were to RTFC members, affiliates and associates in the telecommunications industry. Our credit exposure is partially mitigated by long-term loans guaranteed by the RUS, which totaled \$123 million and \$131 million as of May 31, 2023 and 2022, respectively.

Single-Obligor Concentration

The outstanding loan exposure for our 20 largest borrowers totaled \$6,588 million and \$6,220 million as of May 31, 2023 and 2022, respectively, representing 20% and 21% of total loans outstanding as of each respective date. Our 20 largest borrowers consisted of 10 distribution systems and 10 power supply systems as of May 31, 2023. In comparison, our 20 largest borrowers consisted of 12 distribution systems and eight power supply systems as of May 31, 2022. The largest total outstanding exposure to a single borrower or controlled group represented 1% of total loans outstanding as of both May 31, 2023 and 2022.

We entered into a long-term standby purchase commitment agreement with Farmer Mac during fiscal year 2016. Under this agreement, we may designate certain long-term loans to be covered under the commitment, subject to approval by Farmer Mac, and in the event any such loan later goes into payment default for at least 90 days, upon request by us, Farmer Mac must purchase such loan at par value. We are required to pay Farmer Mac a monthly fee based on the unpaid principal balance of loans covered under the purchase commitment. The aggregate unpaid principal balance of designated and Farmer Mac-approved loans was \$436 million and \$493 million as of May 31, 2023 and 2022, respectively. Loan exposure to our 20 largest borrowers covered under the Farmer Mac agreement totaled \$267 million and \$316 million as of May 31, 2023 and 2022, respectively, which reduced our exposure to the 20 largest borrowers to 19% and 20% as of each respective date. We have had no loan defaults for loans covered under this agreement; therefore, no loans have been put to Farmer Mac for purchase pursuant to the standby purchase agreement as of May 31, 2023.

Geographic Concentration

Although our organizational structure and mission results in single-industry concentration, we serve a geographically diverse group of electric and telecommunications borrowers throughout the U.S. The consolidated number of borrowers with loans outstanding totaled 884 and 883 as of May 31, 2023 and 2022, respectively, located in 49 states and the District of Columbia. Of the 884 and 883 borrowers with loans outstanding as of May 31, 2023 and 2022, respectively, 52 and 49 were electric power supply borrowers as of each respective date. Electric power supply borrowers generally require significantly more capital than electric distribution and telecommunications borrowers.

Texas accounted for the largest number of borrowers with loans outstanding in any one state as of both May 31, 2023 and 2022, as well as the largest concentration of loan exposure. The following table presents the Texas-based number of borrowers and loans outstanding by legal entity and member class, as of May 31, 2023 and 2022.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 4.2: Loan Exposure to Texas-Based Borrowers

(Dollars in thousands)	May 31, 2023			May 31, 2022		
	Number of Borrowers	Amount	% of Total	Number of Borrowers	Amount	% of Total
Member class:						
CFC:						
Distribution	57	\$ 4,319,937	13 %	57	\$ 3,984,887	13 %
Power supply	8	1,128,941	4	8	1,089,896	4
Statewide and associate	1	51,504	—	1	29,335	—
Total CFC	66	5,500,382	17	66	5,104,118	17
NCSC	1	16,667	—	1	378	—
RTFC	2	11,755	—	1	5,853	—
Total loan exposure to Texas-based borrowers	69	5,528,804	17	68	5,110,349	17
Less: Loans covered under Farmer Mac standby purchase commitment		(155,409)	—		(163,369)	(1)
Net loan exposure to Texas-based borrowers.		<u>\$ 5,373,395</u>	<u>17 %</u>		<u>\$ 4,946,980</u>	<u>16 %</u>

Credit Quality Indicators

Assessing the overall credit quality of our loan portfolio and measuring our credit risk is an ongoing process that involves tracking payment status, TDRs, nonperforming loans, charge-offs, the internal risk ratings of our borrowers and other indicators of credit risk. We monitor and subject each borrower and loan facility in our loan portfolio to an individual risk assessment based on quantitative and qualitative factors. Payment status trends and internal risk ratings are indicators, among others, of the probability of borrower default and overall credit quality of our loan portfolio.

Payment Status of Loans

Loans are considered delinquent when contractual principal or interest amounts become past due 30 days or more following the scheduled payment due date. Loans are placed on nonaccrual status when payment of principal or interest is 90 days or more past due or management determines that the full collection of principal and interest is doubtful. The following table presents the payment status, by legal entity and member class, of loans outstanding as of May 31, 2023 and 2022.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 4.3: Payment Status of Loans Outstanding

May 31, 2023						
(Dollars in thousands)	Current	30-89 Days Past Due	> 90 Days Past Due	Total Past Due	Total Loans Outstanding	Nonaccrual Loans
Member class:						
CFC:						
Distribution	\$25,437,077	\$ —	\$ —	\$ —	\$25,437,077	\$ —
Power supply	5,432,895	—	4,347	4,347	5,437,242	112,209
Statewide and associate	200,368	—	—	—	200,368	—
CFC total	<u>31,070,340</u>	<u>—</u>	<u>4,347</u>	<u>4,347</u>	<u>31,074,687</u>	<u>112,209</u>
NCSC	920,159	36,715	—	36,715	956,874	—
RTFC	487,788	—	—	—	487,788	—
Total loans outstanding	<u>\$32,478,287</u>	<u>\$ 36,715</u>	<u>\$ 4,347</u>	<u>\$ 41,062</u>	<u>\$ 32,519,349</u>	<u>\$ 112,209</u>
Percentage of total loans	99.87 %	0.11 %	0.02 %	0.13 %	100.00 %	0.35 %
May 31, 2022						
(Dollars in thousands)	Current	30-89 Days Past Due	> 90 Days Past Due	Total Past Due	Total Loans Outstanding	Nonaccrual Loans
Member class:						
CFC:						
Distribution	\$23,844,242	\$ —	\$ —	\$ —	\$23,844,242	\$ —
Power supply	4,787,832	28,389	85,549	113,938	4,901,770	227,790
Statewide and associate	126,863	—	—	—	126,863	—
CFC total	<u>28,758,937</u>	<u>28,389</u>	<u>85,549</u>	<u>113,938</u>	<u>28,872,875</u>	<u>227,790</u>
NCSC	710,878	—	—	—	710,878	—
RTFC	467,601	—	—	—	467,601	—
Total loans outstanding	<u>\$29,937,416</u>	<u>\$ 28,389</u>	<u>\$ 85,549</u>	<u>\$ 113,938</u>	<u>\$30,051,354</u>	<u>\$ 227,790</u>
Percentage of total loans	99.62 %	0.09 %	0.29 %	0.38 %	100.00 %	0.76 %

We had one CFC electric power supply borrower, Brazos Sandy Creek Electric Cooperative Inc. (“Brazos Sandy Creek”), with a delinquent loan of \$4 million and one NCSC borrower with a delinquent loan of \$37 million as of May 31, 2023. In comparison, we had two CFC electric power supply borrowers, Brazos Electric Power Cooperative, Inc. (“Brazos”) and Brazos Sandy Creek with delinquent loans totaling \$114 million as of May 31, 2022. The decrease in loans on nonaccrual status of \$116 million to \$112 million as of May 31, 2023, from \$228 million was due to the partial charge-offs related to the Brazos and Brazos Sandy Creek loans, and the receipt of loan principal payments on the outstanding nonaccrual loans. See “Troubled Debt Restructurings,” “Nonperforming Loans” and “Net Charge-Offs” below for additional information.

Troubled Debt Restructurings

The following table presents the outstanding balance of modified loans accounted for as TDRs and the performance status, by legal entity and member class, of these loans as of May 31, 2023 and 2022.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 4.4: Troubled Debt Restructurings

(Dollars in thousands)	May 31,					
	2023			2022		
	Number of Borrowers	Outstanding Amount ⁽¹⁾	% of Total Loans Outstanding	Number of Borrowers	Outstanding Amount ⁽¹⁾	% of Total Loans Outstanding
TDR loans:						
Member class:						
CFC—Distribution	1	\$ 4,638	0.02 %	1	\$ 5,092	0.02 %
CFC—Power Supply	1	22,875	0.07	—	—	—
RTFC	1	3,592	0.01	1	4,092	0.01
Total TDR loans	<u>3</u>	<u>\$ 31,105</u>	<u>0.10 %</u>	<u>2</u>	<u>\$ 9,184</u>	<u>0.03 %</u>
Performance status of TDR loans:						
Performing TDR loans	2	\$ 8,230	0.03 %	2	\$ 9,184	0.03 %
Nonperforming TDR loans	1	22,875	0.07	—	—	—
Total TDR loans	<u>3</u>	<u>\$ 31,105</u>	<u>0.10 %</u>	<u>2</u>	<u>\$ 9,184</u>	<u>0.03 %</u>

⁽¹⁾ Represents the unpaid principal balance net of charge-offs and recoveries as of the end of each period.

TDR loans totaled \$31 million as of May 31, 2023, an increase of \$22 million from May 31, 2022, primarily due to the classification of Brazos' nonperforming loans to nonperforming TDR loans during the quarter ended February 28, 2023 ("third quarter of fiscal year 2023"). There were no unadvanced commitments related to TDR loans as of May 31, 2023 or May 31, 2022.

The performing TDR loans outstanding have been performing in accordance with the terms of their respective restructured loan agreements for an extended period of time and were on accrual status as of May 31, 2023 and 2022, respectively. The CFC distribution borrower with the performing TDR loan also had one line of credit as of both May 31, 2023 and 2022. The line of credit facility for \$6 million as of both May 31, 2023 and 2022, is restricted for fuel purchases only. Outstanding loans under this facility totaled \$2 million and \$1 million as of May 31, 2023 and 2022, respectively.

We had nonperforming TDR loans outstanding to Brazos totaling \$23 million as of May 31, 2023, which were on nonaccrual status as of May 31, 2023. Brazos, a CFC Texas-based electric power supply borrower, filed for bankruptcy in March 2021 due to its exposure to elevated wholesale electric power costs during the February 2021 polar vortex. On November 14, 2022, Brazos' plan of reorganization was confirmed by the bankruptcy court and it became effective on December 15, 2022. Due to Brazos experiencing financial difficulty and the principal loan concession provided to Brazos by the bankruptcy court as part of its approval of Brazos' plan of reorganization, which was effective on December 15, 2022, the remaining Brazos loans outstanding were moved from nonperforming loans and classified as nonperforming TDR loans during the third quarter of fiscal year 2023. We did not have any TDR loans classified as nonperforming as of May 31, 2022. Prior to the Brazos loan restructuring, we have not had any loan modifications that were required to be accounted for as TDRs since fiscal year 2016. In June 2023, we received the remaining payment of Brazos' loans outstanding of \$23 million in accordance with the provisions of Brazos' plan of reorganization to repay its loans in full.

Nonperforming Loans

In addition to TDR loans that may be classified as nonperforming, we also may have nonperforming loans that have not been modified as a TDR. The following table presents the outstanding balance of nonperforming loans, by legal entity and member class, as of May 31, 2023 and 2022. Loans classified as nonperforming are placed on nonaccrual status.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 4.5: Nonperforming Loans

(Dollars in thousands)	May 31,					
	2023			2022		
	Number of Borrowers	Outstanding Amount ⁽¹⁾	% of Total Loans Outstanding	Number of Borrowers	Outstanding Amount ⁽¹⁾	% of Total Loans Outstanding
Nonperforming loans:						
Member class:						
CFC—Power supply	2	\$ 89,334	0.27 %	3	\$ 227,790	0.76 %
Total nonperforming loans	<u>2</u>	<u>\$ 89,334</u>	<u>0.27 %</u>	<u>3</u>	<u>\$ 227,790</u>	<u>0.76 %</u>

⁽¹⁾ Represents the unpaid principal balance net of charge-offs and recoveries as of the end of each period.

Nonperforming loans totaled \$89 million as of May 31, 2023, a decrease of \$139 million from May 31, 2022, due to the receipt of loan principal payments, the partial charge-offs related to the Brazos and Brazos Sandy Creek nonperforming loans, and the classification of Brazos’ nonperforming loans to TDR loans during the third quarter of fiscal year 2023, as discussed above. Brazos’ loans outstanding accounted for \$86 million of our total nonperforming loans as of May 31, 2022 and were delinquent and on nonaccrual as of this date.

Brazos Sandy Creek, a wholly-owned subsidiary of Brazos and a CFC Texas-based electric power supply borrower, filed for bankruptcy in March 2022 following the filing of a motion by Brazos to reject its power purchase agreement with Brazos Sandy Creek as part of Brazos’ bankruptcy proceedings. Brazos Sandy Creek’s loan outstanding accounted for \$4 million and \$28 million of our total nonperforming loans as of May 31, 2023 and 2022, respectively, and was delinquent and on nonaccrual as of each date. The loan is secured by Brazos Sandy Creek’s 25% tenant-in-common (“TIC”) ownership interest in the Brazos Sandy Creek Energy Station (“the Plant”), and its rights under a power purchase agreement (“PPA”) with Brazos for the output of the Brazos Sandy Creek Energy Station attributable to the TIC interest. On December 20, 2022, Brazos Sandy Creek’s 25% TIC ownership interest in the Plant was sold for a credit bid of \$105 million to Riesel HoldCo, LLC (“HoldCo,”) an entity formed by the Brazos Sandy Creek noteholders. CFC was allocated ownership shares in HoldCo based on its 7.41% share in the \$105 million credit bid, which totaled \$8 million that was recorded as an equity investment in HoldCo during the current year in the other assets line of our consolidated balance sheets and reduced the Brazos Sandy Creek loan balance by the same amount. HoldCo intends to manage its ownership interest in the Plant directly and potentially sell it at a future date; however, HoldCo has no current timeline for its disposition. In July 2023, we received the remaining payment of Brazos Sandy Creek’s loan outstanding of \$4 million to repay its loans in full.

Net Charge-Offs

Charge-offs represent the amount of a loan that has been removed from our consolidated balance sheet when the loan is deemed uncollectible. Generally the amount of a charge-off is the recorded investment in excess of the discounted expected cash flows from the loan, or, if the loan is collateral dependent, the fair value of the underlying collateral securing the loan. We report charge-offs net of amounts recovered on previously charged-off loans. We experienced charge-offs totaling \$15 million for the CFC electric power supply loan portfolio related to Brazos and Brazos Sandy Creek loans during fiscal year 2023, which resulted in a net charge-off rate of 0.05%. In comparison, we had no loan charge-offs during fiscal years ended May 31, 2022 and 2021. Prior to Brazos’ and Brazos Sandy Creek’s bankruptcy filings, we had not experienced any defaults or charge-offs in our electric utility and telecommunications loan portfolios since fiscal years 2013 and 2017, respectively.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Borrower Risk Ratings

As part of our management of credit risk, we maintain a credit risk-rating framework under which we employ a consistent process for assessing the credit quality of our loan portfolio. We evaluate each borrower and loan facility in our loan portfolio and assign internal borrower and loan facility risk ratings based on consideration of a number of quantitative and qualitative factors. Each risk rating is reassessed annually following the receipt of the borrower's audited financial statements; however, interim risk-rating adjustments may occur as a result of updated information affecting a borrower's ability to fulfill its obligations or other significant developments and trends. We categorize loans in our portfolio based on our internally assigned borrower risk ratings, which are intended to assess the general creditworthiness of the borrower and probability of default. Our borrower risk ratings align with the U.S. federal banking regulatory agencies' credit risk definitions of pass and criticized categories, with the criticized category further segmented among special mention, substandard and doubtful. Pass ratings reflect relatively low probability of default, while criticized ratings have a higher probability of default.

The following is a description of the borrower risk-rating categories.

- *Pass*: Borrowers that are not included in the categories of special mention, substandard or doubtful.
- *Special Mention*: Borrowers that may be characterized by a potential credit weakness or deteriorating financial condition that is not sufficiently serious to warrant a classification of substandard or doubtful.
- *Substandard*: Borrowers that display a well-defined credit weakness that may jeopardize the full collection of principal and interest.
- *Doubtful*: Borrowers that have a well-defined credit weakness or weaknesses that make full collection of principal and interest, on the basis of currently known facts, conditions and collateral values, highly questionable and improbable.

Our internally assigned borrower risk ratings serve as the primary credit quality indicator for our loan portfolio. Because our internal borrower risk ratings provide important information on the probability of default, they are a key input in determining our allowance for credit losses.

Table 4.6 displays total loans outstanding, by borrower risk-rating category and by legal entity and member class, as of May 31, 2023 and 2022. The borrower risk-rating categories presented below correspond to the borrower risk-rating categories used in calculating our collective allowance for credit losses. If a parent company provides a guarantee of full repayment of loans of a subsidiary borrower, we include the loans outstanding in the borrower risk-rating category of the guarantor parent company rather than the risk-rating category of the subsidiary borrower for purposes of calculating the collective allowance.

We present term loans outstanding as of May 31, 2023, by fiscal year of origination for each year during the five-year annual reporting period beginning in fiscal year 2019, and in the aggregate for periods prior to fiscal year 2019. The origination period represents the date CFC advances funds to a borrower, rather than the execution date of a loan facility for a borrower. Revolving loans are presented separately due to the nature of revolving loans. The substantial majority of loans in our portfolio represent fixed-rate advances under secured long-term facilities with terms up to 35 years and as indicated in Table 4.6 below, term loan advances made to borrowers prior to fiscal year 2019 totaled \$17,123 million, representing 52% of our total loans outstanding as of May 31, 2023. The average remaining maturity of our long-term loans, which accounted for 90% of total loans outstanding as of May 31, 2023, was 19 years.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Table 4.6: Loans Outstanding by Borrower Risk Ratings and Origination Year

(Dollars in thousands)	May 31, 2023								
	Term Loans by Fiscal Year of Origination						Revolving Loans	Total	May 31, 2022
	2023	2022	2021	2020	2019	Prior			
Pass									
CFC:									
Distribution	\$2,453,999	\$2,404,404	\$1,643,838	\$1,822,745	\$1,153,864	\$13,838,304	\$1,925,554	\$ 25,242,708	\$23,596,004
Power supply	465,638	348,333	547,897	179,150	375,738	2,687,787	720,490	5,325,033	4,673,980
Statewide and associate	61,671	23,538	1,938	14,732	2,863	16,418	66,150	187,310	112,610
CFC total	2,981,308	2,776,275	2,193,673	2,016,627	1,532,465	16,542,509	2,712,194	30,755,051	28,382,594
NCSC	268,157	24,066	5,678	193,267	3,741	274,826	187,139	956,874	710,878
RTFC	52,015	84,624	75,057	39,157	7,825	192,543	32,975	484,196	463,509
Total pass	<u>\$3,301,480</u>	<u>\$2,884,965</u>	<u>\$2,274,408</u>	<u>\$2,249,051</u>	<u>\$1,544,031</u>	<u>\$17,009,878</u>	<u>\$2,932,308</u>	<u>\$ 32,196,121</u>	<u>\$29,556,981</u>
Special mention									
CFC:									
Distribution	\$ 4,226	\$ —	\$ 4,775	\$ —	\$ 5,003	\$ 12,210	\$ 168,155	\$ 194,369	\$ 248,238
Power supply	—	—	—	—	—	—	—	—	—
Statewide and associate	—	—	—	—	4,755	8,303	—	13,058	14,253
CFC total	4,226	—	4,775	—	9,758	20,513	168,155	207,427	262,491
RTFC	—	—	—	—	—	3,592	—	3,592	4,092
Total special mention	<u>\$ 4,226</u>	<u>\$ —</u>	<u>\$ 4,775</u>	<u>\$ —</u>	<u>\$ 9,758</u>	<u>\$ 24,105</u>	<u>\$ 168,155</u>	<u>\$ 211,019</u>	<u>\$ 266,583</u>
Substandard									
CFC:									
Power supply	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Total substandard	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Doubtful									
CFC:									
Power supply	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 89,334	\$ 22,875	\$ 112,209	\$ 227,790
CFC total	—	—	—	—	—	89,334	22,875	112,209	227,790
RTFC	—	—	—	—	—	—	—	—	—
Total doubtful	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 89,334</u>	<u>\$ 22,875</u>	<u>\$ 112,209</u>	<u>\$ 227,790</u>
Total criticized loans	<u>\$ 4,226</u>	<u>\$ —</u>	<u>\$ 4,775</u>	<u>\$ —</u>	<u>\$ 9,758</u>	<u>\$ 113,439</u>	<u>\$ 191,030</u>	<u>\$ 323,228</u>	<u>\$ 494,373</u>
Total loans outstanding	<u><u>\$3,305,706</u></u>	<u><u>\$2,884,965</u></u>	<u><u>\$2,279,183</u></u>	<u><u>\$2,249,051</u></u>	<u><u>\$1,553,789</u></u>	<u><u>\$17,123,317</u></u>	<u><u>\$3,123,338</u></u>	<u><u>\$ 32,519,349</u></u>	<u><u>\$30,051,354</u></u>

Criticized loans totaled \$323 million and \$494 million as of May 31, 2023 and 2022, respectively, and represented approximately 1% and 2% of total loans outstanding as of each respective date. The decrease of \$171 million in criticized loans was due primarily to loan payments received from a CFC electric distribution borrower in the special mention category, and from a CFC electric power supply borrower, Brazos and Brazos Sandy Creek in the doubtful category, and the partial charge-offs related to Brazos and Brazos Sandy Creek loans during fiscal year 2023. Each of the borrowers with loans outstanding in the criticized category, with the exception of Brazos Sandy Creek, was current with regard to all principal and interest amounts due to us as of May 31, 2023. In contrast, each of the borrowers with loans outstanding in the criticized category, with the exception of Brazos and Brazos Sandy Creek, which filed for bankruptcy in March 2021 and

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

March 2022, respectively, was current with regard to all principal and interest amounts due to us as of May 31, 2022. As mentioned above, subsequent to the year ended May 31, 2023, we received the remaining loan payments of \$23 million and \$4 million from Brazos and Brazos Sandy Creek, respectively, to repay their loans in full. See “Troubled Debt Restructurings” and “Nonperforming Loans” above for additional information on Brazos and Brazos Sandy Creek, respectively.

Special Mention

One CFC electric distribution borrower with loans outstanding of \$194 million and \$248 million as of May 31, 2023 and 2022, respectively, accounted for the substantial majority of loans in the special mention loan category amount of \$211 million and \$267 million as of each respective date. This borrower experienced an adverse financial impact from restoration costs incurred to repair damage caused by two successive hurricanes. We expect that the borrower will continue to receive grant funds from the Federal Emergency Management Agency and the state where it is located for the full reimbursement of the hurricane damage-related restoration costs.

Substandard

We did not have any loans classified as substandard as of May 31, 2023 or May 31, 2022.

Doubtful

Loans outstanding classified as doubtful totaled \$112 million and \$228 million as of May 31, 2023 and 2022, respectively, consisting of total loans outstanding to Brazos and Brazos Sandy Creek totaling \$27 million and \$114 million as of each respective date and loans outstanding to a CFC electric power supply borrower of \$85 million and \$114 million as of each respective date. See “Troubled Debt Restructurings” and “Nonperforming Loans” above for additional information on these loans.

Unadvanced Loan Commitments

Unadvanced loan commitments represent approved and executed loan contracts for which funds have not been advanced to borrowers. The following table presents unadvanced loan commitments, by member class and by loan type, as of May 31, 2023 and 2022.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 4.7: Unadvanced Commitments by Member Class and Loan Type

(Dollars in thousands)	May 31,	
	2023	2022
Member class:		
CFC:		
Distribution	\$ 9,673,712	\$ 9,230,197
Power supply	3,995,128	3,835,535
Statewide and associate	175,150	183,845
Total CFC	13,843,990	13,249,577
NCSC	604,436	551,901
RTFC	340,135	309,724
Total unadvanced commitments	\$ 14,788,561	\$ 14,111,202
Loan type:⁽¹⁾		
Long-term loans:		
Fixed rate	\$ —	\$ —
Variable rate	5,669,634	5,357,205
Total long-term loans	5,669,634	5,357,205
Lines of credit	9,118,927	8,753,997
Total unadvanced commitments	\$ 14,788,561	\$ 14,111,202

⁽¹⁾The interest rate on unadvanced loan commitments is not set until an advance is made; therefore, all unadvanced long-term loan commitments are reported as variable rate. However, the borrower may select either a fixed or a variable rate when an advance is drawn under a loan commitment.

The following table displays, by loan type, the available balance under unadvanced loan commitments as of May 31, 2023 and the related maturities in each fiscal year during the five-year period ended May 31, 2028, and thereafter.

Table 4.8: Unadvanced Loan Commitments

(Dollars in thousands)	Available Balance	Notional Maturities of Unadvanced Loan Commitments					
		2024	2025	2026	2027	2028	Thereafter
Line of credit loans	\$ 9,118,927	\$5,055,192	\$1,238,285	\$ 788,561	\$1,238,399	\$ 662,086	\$ 136,404
Long-term loans	5,669,634	1,019,262	704,667	794,595	1,339,212	1,595,844	216,054
Total	\$14,788,561	\$6,074,454	\$1,942,952	\$1,583,156	\$2,577,611	\$2,257,930	\$ 352,458

Unadvanced line of credit commitments accounted for 62% of total unadvanced loan commitments as of May 31, 2023, while unadvanced long-term loan commitments accounted for 38% of total unadvanced loan commitments. Unadvanced line of credit commitments are typically revolving facilities for periods not to exceed five years and generally serve as supplemental back-up liquidity to our borrowers. Historically, borrowers have not drawn the full commitment amount for line of credit facilities, and we have experienced a very low utilization rate on line of credit loan facilities regardless of whether or not we are obligated to fund the facility where a material adverse change exists.

Our unadvanced long-term loan commitments typically have a five-year draw period under which a borrower may draw funds prior to the expiration of the commitment. We expect that the majority of the long-term unadvanced loan commitments of \$5,670 million will be advanced prior to the expiration of the commitment.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Because we historically have experienced a very low utilization rate on line of credit loan facilities, which account for the majority of our total unadvanced loan commitments, we believe the unadvanced loan commitment total of \$14,789 million as of May 31, 2023 is not necessarily representative of our future funding requirements.

Unadvanced Loan Commitments—Conditional

The substantial majority of our line of credit commitments and all of our unadvanced long-term loan commitments include material adverse change clauses. Unadvanced loan commitments subject to material adverse change clauses totaled \$11,617 million and \$10,908 million as of May 31, 2023 and 2022, respectively. Prior to making an advance on these facilities, we confirm that there has been no material adverse change in the business or condition, financial or otherwise, of the borrower since the time the loan was approved and confirm that the borrower is currently in compliance with loan terms and conditions. In some cases, the borrower’s access to the full amount of the facility is further constrained by the designated purpose, imposition of borrower-specific restrictions or by additional conditions that must be met prior to advancing funds.

Unadvanced Loan Commitments—Unconditional

Unadvanced loan commitments not subject to material adverse change clauses at the time of each advance consisted of unadvanced committed lines of credit totaling \$3,172 million and \$3,203 million as of May 31, 2023 and 2022, respectively. As such, we are required to advance amounts on these committed facilities as long as the borrower is in compliance with the terms and conditions of the facility. The following table summarizes the available balance under unconditional committed lines of credit and the related maturity amounts in each of the five fiscal years subsequent to May 31, 2023 and thereafter.

Table 4.9: Unconditional Committed Lines of Credit—Available Balance

(Dollars in thousands)	Available Balance	Notional Maturities of Unconditional Committed Lines of Credit					
		2024	2025	2026	2027	2028	Thereafter
Committed lines of credit	\$ 3,171,563	\$ 216,750	\$ 742,876	\$ 548,980	\$ 929,415	\$ 693,542	\$ 40,000

Pledged Collateral—Loans

We are required to pledge eligible mortgage notes or other collateral in an amount at least equal to the outstanding balance of our secured debt. Table 4.10 displays the borrowing amount under each of our secured borrowing agreements and the corresponding loans outstanding pledged as collateral as of May 31, 2023 and 2022. See “Note 6—Short-Term Borrowings” and “Note 7—Long-Term Debt” for information on our secured borrowings and other borrowings.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 4.10: Pledged Loans

(Dollars in thousands)	May 31,	
	2023	2022
Collateral trust bonds:		
2007 indenture:		
Collateral trust bonds outstanding	\$ 7,772,711	\$ 7,072,711
Pledged collateral:		
Distribution system mortgage notes pledged	8,719,287	8,564,596
RUS-guaranteed loans qualifying as permitted investments	122,874	114,654
Total pledged collateral	8,842,161	8,679,250
1994 indenture:		
Collateral trust bonds outstanding	\$ 20,000	\$ 25,000
Pledged collateral:		
Distribution system mortgage notes pledged	22,900	29,616
Guaranteed Underwriter Program:		
Notes payable outstanding	\$ 6,720,643	\$ 6,105,473
Pledged collateral:		
Distribution and power supply system mortgage notes pledged	7,877,558	6,904,591
Farmer Mac:		
Notes payable outstanding	\$ 3,149,898	\$ 3,094,679
Pledged collateral:		
Distribution and power supply system mortgage notes pledged	4,294,282	3,445,358
Clean Renewable Energy Bonds Series 2009A:		
Notes payable outstanding	\$ 1,098	\$ 2,755
Pledged collateral:		
Distribution and power supply system mortgage notes pledged	1,029	3,138
Cash	391	392
Total pledged collateral	1,420	3,530

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NOTE 5—ALLOWANCE FOR CREDIT LOSSES

We are required to maintain an allowance based on a current estimate of credit losses that are expected to occur over the remaining term of the loans in our portfolio. Our allowance for credit losses consists of a collective allowance and an asset-specific allowance. Additional information on our current CECL allowance methodology is provided in “Note 1—Summary of Significant Accounting Policies.”

Allowance for Credit Losses—Loan Portfolio

The following tables summarize, by legal entity and member class, changes in the allowance for credit losses for our loan portfolio and present the allowance components for the years ended May 31, 2023, 2022 and 2021.

Table 5.1: Changes in Allowance for Credit Losses

	Year Ended May 31, 2023						
(Dollars in thousands)	CFC Distribution	CFC Power Supply	CFC Statewide & Associate	CFC Total	NCSC	RTFC	Total
Balance as of May 31, 2022.....	\$ 15,781	\$ 47,793	\$ 1,251	\$ 64,825	\$ 1,449	\$ 1,286	\$ 67,560
Provision (benefit) for credit losses.....	(857)	582	(57)	(332)	1,015	(80)	603
Charge-offs.....	—	(15,069)	—	(15,069)	—	—	(15,069)
Balance as of May 31, 2023.....	<u>\$ 14,924</u>	<u>\$ 33,306</u>	<u>\$ 1,194</u>	<u>\$ 49,424</u>	<u>\$ 2,464</u>	<u>\$ 1,206</u>	<u>\$ 53,094</u>

	Year Ended May 31, 2022						
(Dollars in thousands)	CFC Distribution	CFC Power Supply	CFC Statewide & Associate	CFC Total	NCSC	RTFC	Total
Balance as of May 31, 2021.....	\$ 13,426	\$ 64,646	\$ 1,391	\$ 79,463	\$ 1,374	\$ 4,695	\$ 85,532
Provision (benefit) for credit losses.....	2,355	(16,853)	(140)	(14,638)	75	(3,409)	(17,972)
Balance as of May 31, 2022.....	<u>\$ 15,781</u>	<u>\$ 47,793</u>	<u>\$ 1,251</u>	<u>\$ 64,825</u>	<u>\$ 1,449</u>	<u>\$ 1,286</u>	<u>\$ 67,560</u>

	Year Ended May 31, 2021						
(Dollars in thousands)	CFC Distribution	CFC Power Supply	CFC Statewide & Associate	CFC Total	NCSC	RTFC	Total
Balance as of May 31, 2020.....	\$ 8,002	\$ 38,027	\$ 1,409	\$ 47,438	\$ 806	\$ 4,881	\$ 53,125
Cumulative-effect adjustment from adoption of CECL accounting standard.....	3,586	2,034	25	5,645	(15)	(1,730)	3,900
Balance as of June 1, 2020.....	11,588	40,061	1,434	53,083	791	3,151	57,025
Provision (benefit) for credit losses.....	1,838	24,585	(43)	26,380	583	1,544	28,507
Balance as of May 31, 2021.....	<u>\$ 13,426</u>	<u>\$ 64,646</u>	<u>\$ 1,391</u>	<u>\$ 79,463</u>	<u>\$ 1,374</u>	<u>\$ 4,695</u>	<u>\$ 85,532</u>

The following tables present, by legal entity and member class, the components of our allowance for credit losses as of May 31, 2023 and 2022.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Table 5.2: Allowance for Credit Losses Components

(Dollars in thousands)	May 31, 2023						
	CFC Distribution	CFC Power Supply	CFC Statewide & Associate	CFC Total	NCSC	RTFC	Total
Allowance components:							
Collective allowance.....	\$ 14,924	\$ 7,837	\$ 1,194	\$ 23,955	\$ 2,464	\$ 916	\$ 27,335
Asset-specific allowance.....	—	25,469	—	25,469	—	290	25,759
Total allowance for credit losses.....	\$ 14,924	\$ 33,306	\$ 1,194	\$ 49,424	\$ 2,464	\$ 1,206	\$ 53,094
Loans outstanding:⁽¹⁾							
Collectively evaluated loans.....	\$25,432,439	\$5,325,033	\$200,368	\$30,957,840	\$956,874	\$484,196	\$32,398,910
Individually evaluated loans.....	4,638	112,209	—	116,847	—	3,592	120,439
Total loans outstanding.....	\$25,437,077	\$5,437,242	\$200,368	\$31,074,687	\$956,874	\$487,788	\$32,519,349
Allowance ratios:							
Collective allowance coverage ratio ⁽²⁾	0.06 %	0.15 %	0.60 %	0.08 %	0.26 %	0.19 %	0.08 %
Asset-specific allowance coverage ratio ⁽³⁾	—	22.70	—	21.80	—	8.07	21.39
Total allowance coverage ratio ⁽⁴⁾	0.06	0.61	0.60	0.16	0.26	0.25	0.16
May 31, 2022							
(Dollars in thousands)	CFC Distribution	CFC Power Supply	CFC Statewide & Associate	CFC Total	NCSC	RTFC	Total
Allowance components:							
Collective allowance.....	\$ 15,781	\$ 9,355	\$ 1,251	\$ 26,387	\$ 1,449	\$ 1,040	\$ 28,876
Asset-specific allowance.....	—	38,438	—	38,438	—	246	38,684
Total allowance for credit losses.....	\$ 15,781	\$ 47,793	\$ 1,251	\$ 64,825	\$ 1,449	\$ 1,286	\$ 67,560
Loans outstanding:⁽¹⁾							
Collectively evaluated loans.....	\$23,839,150	\$4,673,980	\$126,863	\$28,639,993	\$710,878	\$463,509	\$29,814,380
Individually evaluated loans.....	5,092	227,790	—	232,882	—	4,092	236,974
Total loans outstanding.....	\$23,844,242	\$4,901,770	\$126,863	\$28,872,875	\$710,878	\$467,601	\$30,051,354
Allowance coverage ratios:							
Collective allowance coverage ratio ⁽²⁾	0.07 %	0.20 %	0.99 %	0.09 %	0.20 %	0.22 %	0.10 %
Asset-specific allowance coverage ratio ⁽³⁾	—	16.87	—	16.51	—	6.01	16.32
Total allowance coverage ratio ⁽⁴⁾	0.07	0.98	0.99	0.22	0.20	0.28	0.22

⁽¹⁾Represents the unpaid principal amount of loans as of the end of each period. Excludes unamortized deferred loan origination costs of \$13 million and \$12 million as of May 31, 2023 and 2022, respectively.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

⁽²⁾Calculated based on the collective allowance component at period-end divided by collectively evaluated loans outstanding at period-end.

⁽³⁾Calculated based on the asset-specific allowance component at period-end divided by individually evaluated loans outstanding at period-end.

⁽⁴⁾Calculated based on the total allowance for credit losses at period-end divided by total loans outstanding at period-end.

The allowance for credit losses and allowance coverage ratio was \$53 million and 0.16%, respectively, as of May 31, 2023, a decrease of \$15 million and 6 basis points, respectively, from May 31, 2022, due to reductions in the asset-specific allowance and the collective allowance of \$13 million and \$2 million, respectively. The decrease in asset-specific allowance was primarily attributable to charge-offs totaling \$15 million related to the Brazos and Brazos Sandy Creek loans, partially offset by an increase in the asset-specific allowance for Brazos, Brazos Sandy Creek and a nonperforming CFC power supply loan, due to a reduction and timing change in the expected payments on this loan. The decrease in the collective allowance was primarily attributable to an improvement in the credit quality and risk profile of our loan portfolio, and in the timing of the scheduled loan-level amortization amounts of our loan portfolio, partially offset by an increase in the collective allowance due to the loan portfolio growth.

Reserve for Credit Losses—Unadvanced Loan Commitments

In addition to the allowance for credit losses for our loan portfolio, we maintain an allowance for credit losses for unadvanced loan commitments, which we refer to as our “reserve for credit losses” because this amount is reported as a component of other liabilities on our consolidated balance sheets. We measure the reserve for credit losses for unadvanced loan commitments based on expected credit losses over the contractual period of our exposure to credit risk arising from our obligation to extend credit, unless that obligation is unconditionally cancellable by us. The reserve for credit losses related to our off-balance sheet exposure for unadvanced loan commitments was less than \$1 million as of both May 31, 2023 and 2022.

NOTE 6—SHORT-TERM BORROWINGS

Short-term borrowings consist of borrowings with an original contractual maturity of one year or less and do not include the current portion of long-term debt. Our short-term borrowings totaled \$4,546 million and accounted for 15% of total debt outstanding as of May 31, 2023, compared with \$4,981 million, or 17% of total debt outstanding, as of May 31, 2022. The following table provides comparative information on our short-term borrowings and weighted-average interest rates as of May 31, 2023 and 2022.

Table 6.1: Short-Term Borrowings Sources and Weighted-Average Interest Rates

	May 31,			
	2023		2022	
(Dollars in thousands)	Amount	Weighted-Average Interest Rate	Amount	Weighted-Average Interest Rate
Short-term borrowings:				
Commercial paper:				
Commercial paper dealers, net of discounts.....	\$ 1,293,167	5.32 %	\$1,024,813	0.96 %
Commercial paper members, at par.....	1,017,431	4.76	1,358,069	0.92
Total commercial paper.....	<u>2,310,598</u>	5.07	<u>2,382,882</u>	0.94
Select notes to members.....	1,630,799	4.96	1,753,441	1.11
Daily liquidity fund notes to members.....	238,329	4.35	427,790	0.80
Medium-term notes to members.....	366,549	4.64	417,054	0.66
Total short-term borrowings.....	<u>\$ 4,546,275</u>	4.96	<u>\$4,981,167</u>	0.97

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

We issue commercial paper for periods of one to 270 days. We also issue select notes for periods ranging from 30 to 270 days. Select notes are unsecured obligations that do not require backup bank lines of credit for liquidity purposes. These notes require a larger minimum investment than our commercial paper sold to members and, as a result, offer a higher interest rate than our commercial paper to members. We also issue daily liquidity fund notes, which are unsecured obligations that do not require backup bank lines of credit for liquidity purposes. We also issue medium-term notes, which represent unsecured obligations that may be issued through dealers in the capital markets or directly to our members.

Subsequent to the year ended May 31, 2023, we borrowed \$500 million in short-term notes payable under the note purchase agreement with Farmer Mac. We provide additional information on this revolving note purchase agreement below in “Note 7—Long-Term Debt.”

Committed Bank Revolving Line of Credit Agreements

The following table presents the amount available for access under our bank revolving line of credit agreements as of May 31, 2023.

Table 6.2: Committed Bank Revolving Line of Credit Agreements Available Amounts

(Dollars in millions)	May 31, 2023			Maturity	Annual Facility Fee ⁽¹⁾
	Total Commitment	Letters of Credit Outstanding	Available Amount		
Bank revolving agreements:					
3-year agreement	\$ 1,245	\$ —	\$ 1,245	November 28, 2025	7.5 bps
4-year agreement	1,355	2	1,353	November 28, 2026	10.0 bps
Total	\$ 2,600	\$ 2	\$ 2,598		

⁽¹⁾ Facility fee determined by CFC’s senior unsecured credit ratings based on the pricing schedules put in place at the inception of the related agreement.

On October 20, 2022, we amended the three-year and four-year committed bank revolving line of credit agreements to extend the maturity dates to November 28, 2025 and November 28, 2026, respectively, and to replace LIBOR with Term Secured Overnight Financing Rate (“SOFR”). The total commitment amount under the three-year facility and the four-year facility remained unchanged at \$1,245 million and \$1,355 million, respectively, resulting in a combined total commitment amount under the two facilities of \$2,600 million. These agreements allow us to request up to \$300 million of letters of credit, which, if requested, results in a reduction in the total amount available for our use.

We did not have any outstanding borrowings under our committed bank revolving line of credit agreements as of May 31, 2023; however, we had letters of credit outstanding of \$2 million under the four-year committed bank revolving agreement as of this date. We were in compliance with all covenants and conditions under the agreements as of May 31, 2023.

NOTE 7—LONG-TERM DEBT

The following table displays, by debt product type, long-term debt outstanding, and the weighted-average interest rate and maturity date as of May 31, 2023 and 2022. Long-term debt outstanding totaled \$23,947 million and accounted for 77% of total debt outstanding as of May 31, 2023, compared with \$21,545 million and 75% of total debt outstanding as of May 31, 2022. Long-term debt with fixed- and variable-interest rate accounted for 93% and 7%, respectively, of our total long-term debt outstanding as of May 31, 2023, compared with 90% and 10%, respectively, of our total long-term debt outstanding as of May 31, 2022.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Table 7.1: Long-Term Debt—Debt Product Types and Weighted-Average Interest Rates

(Dollars in thousands)	May 31,					
	2023			2022		
	Amount	Weighted-Average Interest Rate	Maturity Date	Amount	Weighted-Average Interest Rate	Maturity Date
Secured long-term debt:						
Collateral trust bonds	\$ 7,792,711	3.46 %	2023-2049	\$ 7,097,711	3.17 %	2023-2049
Unamortized discount, net	(178,832)			(216,608)		
Debt issuance costs	(35,906)			(32,613)		
Total collateral trust bonds	<u>7,577,973</u>			<u>6,848,490</u>		
Guaranteed Underwriter Program notes payable	6,720,643	3.09	2025-2053	6,105,473	2.69	2025-2052
Farmer Mac notes payable	3,149,898	3.92	2023-2049	3,094,679	2.33	2022-2049
Other secured notes payable	1,098	3.06	2023	2,755	3.10	2022-2023
Debt issuance costs	(2)			(9)		
Total other secured notes payable	<u>1,096</u>			<u>2,746</u>		
Total secured notes payable	<u>9,871,637</u>			<u>9,202,898</u>		
Total secured long-term debt	<u>17,449,610</u>	3.40		<u>16,051,388</u>	2.83	
Unsecured long-term debt:						
Medium-term notes sold through dealers	6,152,726	3.52	2023-2037	5,263,496	2.20	2022-2032
Medium-term notes sold to members	365,260	3.98	2023-2037	250,397	2.70	2022-2037
Medium-term notes sold through dealers and to members	6,517,986	3.55		5,513,893	2.22	
Unamortized premium (discount), net	4			(2,086)		
Debt issuance costs	(21,122)			(19,723)		
Total unsecured medium-term notes	<u>6,496,868</u>			<u>5,492,084</u>		
Unsecured notes payable	71	—	2023	1,979	—	2022-2023
Unamortized discount	(1)			(10)		
Debt issuance costs	—			(1)		
Total unsecured notes payable	<u>70</u>			<u>1,968</u>		
Total unsecured long-term debt	<u>6,496,938</u>	3.55		<u>5,494,052</u>	2.22	
Total long-term debt	<u>\$23,946,548</u>	3.44		<u>\$21,545,440</u>	2.68	

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the principal amount of long-term debt maturing in each of the five fiscal years subsequent to May 31, 2023 and thereafter.

Table 7.2: Long-Term Debt—Maturities and Weighted-Average Interest Rates

<u>(Dollars in thousands)</u>	<u>Maturity Amount</u>	<u>Weighted-Average Interest Rate</u>
2024	\$ 2,277,050	3.00 %
2025	2,286,088	2.73
2026	3,527,228	3.77
2027	1,631,434	2.11
2028	2,156,615	3.74
Thereafter	12,303,992	3.68
Total	<u>\$ 24,182,407</u>	3.44

Secured Debt

Long-term secured debt of \$17,450 million and \$16,051 million as of May 31, 2023 and 2022, respectively, represented 73% and 75% of total long-term debt outstanding as of each respective date. We discuss below our long-term secured debt types and the activity during fiscal year 2023. We were in compliance with all covenants and conditions under our secured debt indentures as of May 31, 2023 and 2022. We are required to pledge eligible mortgage notes in an amount at least equal to the outstanding balance of our secured debt. See “Note 4—Loans” for information on pledged collateral under our secured debt agreements.

Collateral Trust Bonds

Collateral trust bonds represent secured obligations sold to investors in the capital markets. Collateral trust bonds are secured by the pledge of mortgage notes or eligible securities in an amount at least equal to the principal balance of the bonds outstanding. We issued aggregate principal amount of collateral trust bonds totaling \$1,050 million with an average fixed interest rate of 5.17% and an average term of 10 years during fiscal year 2023.

Guaranteed Underwriter Program Notes Payable

We borrowed \$800 million and repaid \$185 million of notes payable outstanding under the Guaranteed Underwriter Program during fiscal year 2023. We had up to \$1,025 million available for access under the Guaranteed Underwriter Program as of May 31, 2023. On December 15, 2022, we closed on a \$750 million committed loan facility (“Series T”) from the Federal Financing Bank under the Guaranteed Underwriter Program. Pursuant to this facility, we may borrow any time before July 15, 2027. Each advance is subject to quarterly amortization and a final maturity not longer than 30 years from the date of the advance.

The notes outstanding under the Guaranteed Underwriter Program contain a provision that if during any portion of the fiscal year, our senior secured credit ratings do not have at least two of the following ratings: (i) A3 or higher from Moody’s, (ii) A- or higher from S&P, (iii) A- or higher from Fitch or (iv) an equivalent rating from a successor rating agency to any of the above rating agencies, we may not make cash patronage capital distributions in excess of 5% of total patronage capital. We are required to pledge eligible distribution system or power supply system loans as collateral in an amount at least equal to the total principal amount of notes outstanding under the Guaranteed Underwriter Program.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Farmer Mac Notes Payable

We have a revolving note purchase agreement with Farmer Mac, under which we can borrow up to \$6,000 million from Farmer Mac, at any time, subject to market conditions through June 30, 2027. The agreement has successive automatic one-year renewals beginning June 30, 2026, unless Farmer Mac provides 425 days' written notice of non-renewal. Pursuant to this revolving note purchase agreement, we can borrow, repay and re-borrow funds at any time through maturity, as market conditions permit, provided that the outstanding principal amount at any time does not exceed the total available under the agreement. Each borrowing under the revolving note purchase agreement is evidenced by a pricing agreement setting forth the interest rate, maturity date and other related terms as we may negotiate with Farmer Mac at the time of each such borrowing. We may select a fixed rate or variable rate at the time of each advance with a maturity as determined in the applicable pricing agreement. The amount outstanding under this agreement included \$3,150 million of long-term debt as of May 31, 2023. We borrowed and repaid \$500 million in short-term notes payable and borrowed \$550 million in long-term notes payable under the note purchase agreement with Farmer Mac during fiscal year 2023. The amount available for borrowing totaled \$2,850 million as of May 31, 2023.

Unsecured Debt

Long-term unsecured debt of \$6,497 million and \$5,494 million as of May 31, 2023 and 2022, respectively, represented 27% and 25% of total long-term debt outstanding as of each respective date. The increase in long-term unsecured debt of \$1,003 million for fiscal year 2023 was primarily attributable to dealer medium-term notes issuance, as described below, partially offset by dealer medium-term notes repayments.

Medium-Term Notes

Medium-term notes represent unsecured obligations that may be issued through dealers in the capital markets or directly to our members. We issued aggregate principal amount of dealer medium-term notes totaling \$1,700 million with an average fixed interest rate of 4.87% and an average term of four years during the year ended May 31, 2023. Subsequent to the year ended May 31, 2023, we issued \$400 million aggregate principal amount of dealer medium-term notes at a fixed rate of 5.05% due on September 15, 2028.

NOTE 8—SUBORDINATED DEFERRABLE DEBT

Subordinated deferrable debt represents long-term debt that is subordinated to all debt other than subordinated certificates held by our members. Our 4.75% and 5.25% subordinated deferrable debt due 2043 and 2046, respectively, was issued for a term of up to 30 years, pays interest semiannually, may be called at par after 10 years, converts to a variable rate after 10 years and allows us to defer the payment of interest for one or more consecutive interest periods not exceeding five consecutive years.

In April 2023, our 4.75% subordinated deferrable debt due 2043 converted to a variable rate based on 3-month LIBOR plus 2.91%. The variable-rate index on this subordinated deferrable debt was converted from 3-month LIBOR to 3-month Term SOFR plus the Alternative Reference Rates Committee ("ARRC") recommended credit spread adjustment of 26.161 basis points at the variable-rate reset date effective in July 2023. Our 5.25% subordinated deferrable debt due 2046 will convert to a variable rate in April 2026 based on 3-month Term SOFR plus the ARRC recommended credit spread adjustment of 26.161 basis points plus 3.63%. Our 5.50% subordinated deferrable debt due 2064 was issued for a term of up to 45 years, pays interest quarterly, may be called at par after five years and allows us to defer the payment of interest for one or more consecutive interest periods not exceeding 40 consecutive quarterly periods.

On May 26, 2023, we issued \$300 million of 7.125% subordinated deferrable debt due 2053 for a term of up to 30 years, which pays interest semiannually, may be called at par every five years, resets to a new fixed rate every five years based on the five-year U.S. Treasury rate plus a spread of 3.533% and allows us to defer the payment of interest for one or more

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

consecutive interest periods not exceeding 20 consecutive semiannual periods. To date, we have not exercised our right to defer interest payments. On June 26, 2023, we redeemed \$100 million in principal amount of our \$400 million subordinated deferrable debt due 2043, at par plus accrued interest.

The following table presents, by issuance, subordinated deferrable debt outstanding and the weighted-average interest rates as of May 31, 2023 and 2022.

Table 8.1: Subordinated Deferrable Debt Outstanding and Weighted-Average Interest Rates

	May 31,				Maturity and Call Dates		
	2023		2022		Term in Years	Maturity	Call Date
(Dollars in thousands)	Outstanding Amount	Weighted-Average Interest Rate	Outstanding Amount	Weighted-Average Interest Rate			
Issuances of subordinated notes:							
Variable issuance 2013....	\$ 400,000	8.21 %	\$ 400,000	4.75 %	30	2043	April 30, 2023
5.25% issuance 2016.....	350,000	5.25	350,000	5.25	30	2046	April 20, 2026
5.50% issuance 2019.....	250,000	5.50	250,000	5.50	45	2064	May 15, 2024
7.125% issuance 2023....	300,000	7.13	—	—	30	2053	June 15, 2028
Total aggregate principal amount.....	1,300,000		1,000,000				
Debt issuance costs.....	(16,564)		(13,482)				
Total subordinated deferrable debt.....	<u>\$ 1,283,436</u>	6.64	<u>\$ 986,518</u>	5.11			

NOTE 9—MEMBERS’ SUBORDINATED CERTIFICATES

Membership Subordinated Certificates

Prior to June 2009, CFC members were required to purchase membership subordinated certificates as a condition of membership. Such certificates are interest-bearing, unsecured, subordinated debt. Membership certificates typically have an original maturity of 100 years and pay interest at 5% semiannually. No requirement to purchase membership certificates has existed for NCSC or RTFC members.

Loan and Guarantee Subordinated Certificates

Members obtaining long-term loans, certain line of credit loans or guarantees may be required to purchase additional loan or guarantee subordinated certificates with each such loan or guarantee based on the borrower’s debt-to-equity ratio with CFC. These certificates are unsecured, subordinated debt and may be interest bearing or non-interest bearing.

Under our current policy, most borrowers requesting standard loans are not required to buy subordinated certificates as a condition of a loan or guarantee. Borrowers meeting certain criteria, including but not limited to, high leverage ratios, or borrowers requesting large facilities, may be required to purchase loan or guarantee subordinated certificates or member capital securities (described below) as a condition of the loan. Loan subordinated certificates have the same maturity as the related long-term loan. Some certificates may amortize annually based on the outstanding loan balance.

The interest rates payable on guarantee subordinated certificates purchased in conjunction with our guarantee program vary in accordance with applicable CFC policy. Guarantee subordinated certificates have the same maturity as the related guarantee.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Member Capital Securities

CFC offers member capital securities to its voting members. Member capital securities are interest-bearing, unsecured obligations of CFC, which are subordinate to all existing and future senior and subordinated indebtedness of CFC held by non-members of CFC, but rank proportionally to our member subordinated certificates. Member capital securities mature 30 years from the date of issuance and are callable at par at our option five years from the date of issuance and anytime thereafter. The interest rate for new member capital securities issuance is set at the time of issuance. These securities represent voluntary investments in CFC by the members. Member capital securities issued prior to fiscal year 2023 have a call option of 10 years from the date of issuance and anytime thereafter. The following table displays members' subordinated certificates and the weighted-average interest rates as of May 31, 2023 and 2022.

Table 9.1: Members' Subordinated Certificates Outstanding and Weighted-Average Interest Rates

(Dollars in thousands)	May 31,			
	2023		2022	
	Amounts Outstanding	Weighted- Average Interest Rate	Amounts Outstanding	Weighted- Average Interest Rate
Membership subordinated certificates:				
Certificates maturing 2025 through 2119	\$ 628,595		\$ 628,591	
Subscribed and unissued ⁽¹⁾	19		12	
Total membership subordinated certificates	628,614	4.94 %	628,603	4.95 %
Loan and guarantee subordinated certificates:				
Interest-bearing loan subordinated certificates maturing through 2045	208,192		216,266	
Non-interest-bearing loan subordinated certificates maturing through 2047	112,978		121,744	
Subscribed and unissued ⁽¹⁾	41		45	
Total loan subordinated certificates	321,211	2.65	338,055	2.64
Interest-bearing guarantee subordinated certificates maturing through 2044	27,138	5.91	27,333	5.90
Total loan and guarantee subordinated certificates	348,349	2.91	365,388	2.88
Member capital securities:				
Securities maturing through 2052	246,163	5.01	240,170	5.00
Total members' subordinated certificates	\$ 1,223,126	4.38	\$ 1,234,161	4.35

⁽¹⁾ The subscribed and unissued subordinated certificates represent subordinated certificates that members are required to purchase. Upon collection of full payment of the subordinated certificate amount, the certificate will be reclassified from subscribed and unissued to outstanding.

The weighted-average maturity for all membership subordinated certificates outstanding was 54 and 55 years as of May 31, 2023 and 2022, respectively. The following table presents the amount of members' subordinated certificates maturing in each of the five fiscal years subsequent to May 31, 2023 and thereafter.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 9.2: Members' Subordinated Certificate Maturities and Weighted-Average Interest Rates

<u>(Dollars in thousands)</u>	<u>Amount Maturing⁽¹⁾</u>	<u>Weighted- Average Interest Rate</u>
2024	\$ 5,861	2.22 %
2025	7,481	2.71
2026	63,078	3.24
2027	8,052	2.00
2028	5,487	3.04
Thereafter	1,133,107	4.49
Total	<u>\$ 1,223,066</u>	4.38

⁽¹⁾Excludes \$0.06 million in subscribed and unissued member subordinated certificates for which a payment has been received, but no certificate has been issued. Amortizing member loan subordinated certificates totaling \$159 million are amortizing annually based on the unpaid principal balance of the related loan. Amortization payments on these certificates totaled \$12 million in fiscal year 2023 and represented 8% of amortizing loan subordinated certificates outstanding.

NOTE 10—DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

We are an end user of derivative financial instruments and do not engage in derivative trading. Derivatives may be privately negotiated contracts, which are often referred to as OTC derivatives, or they may be listed and traded on an exchange. We generally engage in OTC derivative transactions. Our derivative instruments are an integral part of our interest rate risk-management strategy. Our principal purpose in using derivatives is to manage our aggregate interest rate risk profile within prescribed risk parameters. The derivative instruments we use primarily consist of interest rate swaps, which we typically hold to maturity. In addition, we may use Treasury locks to manage the interest rate risk associated with future debt issuance or debt that is scheduled to reprice in the future.

Notional Amount and Maturities of Derivatives Not Designated as Accounting Hedges

The notional amount is used only as the basis on which interest payments are determined and is not the amount exchanged, nor recorded on our consolidated balance sheets. The following table shows, by derivative instrument type, the notional amount, the weighted-average rate paid and the weighted-average interest rate received for our interest rate swaps as of May 31, 2023 and 2022. For the substantial majority of interest rate swap agreements, a LIBOR index is currently used as the basis for determining variable interest payment amounts each period.

Table 10.1: Derivative Notional Amount and Weighted-Average Rates

<u>(Dollars in thousands)</u>	<u>May 31,</u>					
	<u>2023</u>			<u>2022</u>		
	<u>Notional Amount</u>	<u>Weighted- Average Rate Paid</u>	<u>Weighted- Average Rate Received</u>	<u>Notional Amount</u>	<u>Weighted- Average Rate Paid</u>	<u>Weighted- Average Rate Received</u>
Pay-fixed swaps	\$ 5,920,269	2.75 %	5.26 %	\$ 5,957,631	2.60 %	1.24 %
Receive-fixed swaps	1,700,000	6.05	2.97	1,980,000	1.53	2.86
Subtotal	7,620,269	3.49	4.75	7,937,631	2.33	1.64
Forward pay-fixed swaps	195,845			124,000		
Total interest rate swaps	<u>\$ 7,816,114</u>			<u>\$ 8,061,631</u>		

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the notional amount of our interest rate swaps maturing in each of the five fiscal years subsequent to May 31, 2023 and thereafter.

Table 10.2: Derivative Notional Amount Maturities

(Dollars in thousands)	Notional Amount	Notional Amortization and Maturities					Thereafter
		2024	2025	2026	2027	2028	
Interest rate swaps	\$7,816,114	\$823,574	\$418,928	\$1,066,485	\$343,661	\$604,200	\$4,559,266

Cash Flow Hedges

During fiscal year 2023, we executed three Treasury lock agreements with an aggregate notional amount of \$400 million to hedge interest rate risk by locking in the underlying U.S. Treasury interest rate component of interest expense payments on anticipated debt issuances. The Treasury locks were designated and qualified as cash flow hedges. We terminated these Treasury locks in February 2023 and recorded a net settlement gain of \$7 million in AOCI, which will be reclassified into interest expense over the term that the hedged debt transaction affects earnings. We did not have any derivatives designated as accounting hedges as of May 31, 2023 or May 31, 2022.

Impact of Derivatives on Consolidated Balance Sheets

The following table displays the fair value of the derivative assets and derivative liabilities, by derivatives type, recorded on our consolidated balance sheets and the related outstanding notional amount as of May 31, 2023 and 2022.

Table 10.3: Derivative Assets and Liabilities at Fair Value

(Dollars in thousands)	May 31,			
	2023		2022	
	Fair Value	Notional Amount ⁽¹⁾	Fair Value	Notional Amount ⁽¹⁾
Derivative assets:				
Interest rate swaps	\$ 460,762	\$ 5,405,274	\$ 222,042	\$ 4,791,699
Total derivative assets	<u>\$ 460,762</u>	<u>\$ 5,405,274</u>	<u>\$ 222,042</u>	<u>\$ 4,791,699</u>
Derivative liabilities:				
Interest rate swaps	\$ 115,074	\$ 2,410,840	\$ 128,282	\$ 3,269,932
Total derivative liabilities	<u>\$ 115,074</u>	<u>\$ 2,410,840</u>	<u>\$ 128,282</u>	<u>\$ 3,269,932</u>

⁽¹⁾ The notional amount includes \$196 million and \$124 million notional amount of forward starting swaps, as shown above in Table 10.1: Derivative Notional Amount and Weighted-Average Rates, with an effective start date subsequent to May 31, 2023 and May 31, 2022, respectively, outstanding as of May 31, 2023 and May 31, 2022, respectively. The fair value of these swaps as of May 31, 2023 and May 31, 2022 is included in the above table and in our consolidated financial statements.

All of our master swap agreements include netting provisions that allow for offsetting of all contracts with a given counterparty in the event of default by one of the two parties. However, as indicated above, in “Note 1—Summary of Significant Accounting Policies,” we report derivative asset and liability amounts on a gross basis by individual contract. The following table presents the gross fair value of derivative assets and liabilities reported on our consolidated balance sheets as of May 31, 2023 and 2022, and provides information on the impact of netting provisions under our master swap agreements and collateral pledged, if any.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 10.4: Derivative Gross and Net Amounts

(Dollars in thousands)	May 31, 2023					
	Gross Amount of Recognized Assets/ Liabilities	Gross Amount Offset in the Balance Sheet	Net Amount of Assets/ Liabilities Presented in the Balance Sheet	Gross Amount Not Offset in the Balance Sheet		Net Amount
				Financial Instruments	Cash Collateral Pledged	
Derivative assets:						
Interest rate swaps	\$ 460,762	\$ —	\$ 460,762	\$ 112,047	\$ —	\$ 348,715
Derivative liabilities:						
Interest rate swaps	115,074	—	115,074	112,047	—	3,027

(Dollars in thousands)	May 31, 2022					
	Gross Amount of Recognized Assets/ Liabilities	Gross Amount Offset in the Balance Sheet	Net Amount of Assets/ Liabilities Presented in the Balance Sheet	Gross Amount Not Offset in the Balance Sheet		Net Amount
				Financial Instruments	Cash Collateral Pledged	
Derivative assets:						
Interest rate swaps	\$ 222,042	\$ —	\$ 222,042	\$ 103,228	\$ —	\$ 118,814
Derivative liabilities:						
Interest rate swaps	128,282	—	128,282	103,228	—	25,054

Impact of Derivatives on Consolidated Statements of Operations

The primary factors affecting the fair value of our derivatives and the derivative gains (losses) recorded in our consolidated statements of operations include changes in interest rates, the shape of the swap curve and the composition of our derivative portfolio. We generally record derivative losses when interest rates decline and derivative gains when interest rates rise, as our derivative portfolio consists of a higher proportion of pay-fixed swaps than receive-fixed swaps.

The following table presents the components of the derivative gains (losses) reported in our consolidated statements of operations for fiscal years 2023, 2022 and 2021. Derivative cash settlements interest expense represents the net periodic contractual interest amount for our interest rate swaps during the reporting period. Derivative forward value gains (losses) represent the change in fair value of our interest rate swaps during the reporting period due to changes in expected future interest rates over the remaining life of our derivative contracts. We classify the derivative cash settlement amounts for the net periodic contractual interest expense on our interest rate swaps as an operating activity in our consolidated statements of cash flows.

Table 10.5: Derivative Gains (Losses)

(Dollars in thousands)	Year Ended May 31,		
	2023	2022	2021
Derivative gains (losses) attributable to:			
Derivative cash settlements interest income (expense)	\$ 33,577	\$ (101,385)	\$ (115,645)
Derivative forward value gains	<u>252,267</u>	<u>557,867</u>	<u>621,946</u>
Derivative gains	<u>\$ 285,844</u>	<u>\$ 456,482</u>	<u>\$ 506,301</u>

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Credit Risk-Related Contingent Features

Our derivative contracts typically contain mutual early-termination provisions, generally in the form of a credit rating trigger. Under the mutual credit rating trigger provisions, either counterparty may, but is not obligated to, terminate and settle the agreement if the credit rating of the other counterparty falls below a level specified in the agreement. If a derivative contract is terminated, the amount to be received or paid by us would be equal to the prevailing fair value, as defined in the agreement, as of the termination date.

During fiscal year 2023, Moody's, S&P and Fitch affirmed CFC's credit ratings and stable outlook. Our senior unsecured credit ratings from Moody's, S&P and Fitch were A2, A- and A, respectively, as of May 31, 2023. Moody's, S&P and Fitch had our ratings on stable outlook as of May 31, 2023. Our credit ratings and outlook remain unchanged as of the date of this Report.

The following table displays the notional amounts of our derivative contracts with rating triggers as of May 31, 2023, and the payments that would be required if the contracts were terminated as of that date because of a downgrade of our unsecured credit ratings or the counterparty's unsecured credit ratings below A3/A-, below Baa1/BBB+, to or below Baa2/BBB, or to or below Ba2/BB+ by Moody's or S&P, respectively. In calculating the payment amounts that would be required upon termination of the derivative contracts, we assume that amounts for each counterparty would be netted in accordance with the provisions of the master netting agreements with the counterparty. The net payment amounts are based on the fair value of the underlying derivative instrument, excluding the credit risk valuation adjustment, plus any unpaid accrued interest amounts.

Table 10.6: Derivative Credit Rating Trigger Exposure

(Dollars in thousands)	Notional Amount	Payable Due from CFC	Receivable Due to CFC	Net Receivable (Payable)
Impact of rating downgrade trigger:				
Falls below A3/A- ⁽¹⁾	\$ 30,930	\$ (1,450)	\$ —	\$ (1,450)
Falls below Baa1/BBB+	5,336,304	(1,607)	227,613	226,006
Falls to or below Baa2/BBB ⁽²⁾	320,589	—	17,865	17,865
Total.....	<u>\$ 5,687,823</u>	<u>\$ (3,057)</u>	<u>\$ 245,478</u>	<u>\$ 242,421</u>

⁽¹⁾Rating trigger for CFC falls below A3/A-, while rating trigger for counterparty falls below Baa1/BBB+ by Moody's or S&P, respectively.

⁽²⁾Rating trigger for CFC falls to or below Baa2/BBB, while rating trigger for counterparty falls to or below Ba2/BB+ by Moody's or S&P, respectively.

We have interest rate swaps with one counterparty that are subject to a ratings trigger and early termination provision in the event of a downgrade of CFC's senior unsecured credit ratings below Baa3, BBB- or BBB- by Moody's, S&P or Fitch, respectively. The outstanding notional amount of these swaps, which is not included in the above table, totaled \$227 million as of May 31, 2023. These swaps were in an unrealized gain position of \$26 million as of May 31, 2023.

Our largest counterparty exposure, based on the outstanding notional amount, accounted for approximately 23% and 24% of the total outstanding notional amount of derivatives as of May 31, 2023 and 2022, respectively. The aggregate fair value amount, including the credit valuation adjustment, of all interest rate swaps with rating triggers that were in a net liability position was \$3 million as of May 31, 2023.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NOTE 11—EQUITY

Total equity increased \$447 million to \$2,589 million as of May 31, 2023, attributable primarily to our reported net income of \$502 million for the year ended May 31, 2023, partially offset by the patronage capital retirement of \$59 million authorized by the CFC Board of Directors in July 2022.

Table 11.1: Equity

(Dollars in thousands)	May 31,	
	2023	2022
Membership fees	\$ 969	\$ 970
Educational fund	2,565	2,417
Total membership fees and educational fund	3,534	3,387
Patronage capital allocated	1,006,115	954,988
Members' capital reserve	1,202,152	1,062,286
Unallocated net income (loss):		
Prior year-end cumulative derivative forward value gains (losses)	92,363	(461,162)
Current-year derivative forward value gains ⁽¹⁾	250,261	553,525
Current year-end cumulative derivative forward value gains	342,624	92,363
Other unallocated net loss	(709)	(709)
Unallocated net gain	341,915	91,654
CFC retained equity	2,553,716	2,112,315
Accumulated other comprehensive income	8,343	2,258
Total CFC equity	2,562,059	2,114,573
Noncontrolling interests	27,190	27,396
Total equity	\$ 2,589,249	\$ 2,141,969

⁽¹⁾ Represents derivative forward value gains (losses) for CFC only, as total CFC equity does not include the noncontrolling interests of the consolidated variable interest entities NCSC and RTFC. See "Note 16—Business Segments" for the statements of operations for CFC.

Allocation of Net Earnings and Retirement of Patronage Capital—CFC

District of Columbia cooperative law requires cooperatives to allocate net earnings to patrons, to a general reserve in an amount sufficient to maintain a balance of at least 50% of paid-in capital and to a cooperative educational fund, as well as permits additional allocations to board-approved reserves. District of Columbia cooperative law also requires that a cooperative's net earnings be allocated to all patrons in proportion to their individual patronage and each patron's allocation be distributed to the patron unless the patron agrees that the cooperative may retain its share as additional capital.

Annually, the CFC Board of Directors allocates its net earnings to its patrons in the form of patronage capital, to a cooperative educational fund, to a general reserve, if necessary, and to board-approved reserves. An allocation to the general reserve is made, if necessary, to maintain the balance of the general reserve at 50% of the membership fees collected. The general reserve is included in the patronage capital allocated component of CFC's retained equity. CFC's bylaws require the allocation to the cooperative educational fund to be at least 0.25% of its net earnings. Funds from the cooperative educational fund are disbursed annually to statewide cooperative organizations to fund the teaching of cooperative principles and for other cooperative education programs.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Currently, CFC has one additional board-approved reserve, the members' capital reserve. The CFC Board of Directors determines the amount of net earnings that is allocated to the members' capital reserve, if any. The members' capital reserve represents net earnings that CFC holds to increase equity retention. The net earnings held in the members' capital reserve have not been specifically allocated to members, but may be allocated to individual members in the future as patronage capital if authorized by the CFC Board of Directors.

All remaining net earnings are allocated to CFC's members in the form of patronage capital. The amount of net earnings allocated to each member is based on the member's patronage of CFC's lending programs during the year. No interest is earned by members on allocated patronage capital. There is no effect on CFC's total equity as a result of allocating net earnings to members in the form of patronage capital or to board-approved reserves. The CFC Board of Directors has voted annually to retire a portion of the patronage capital allocation. Upon retirement, patronage capital is paid out in cash to the members to whom it was allocated. CFC's total equity is reduced by the amount of patronage capital retired to its members and by amounts disbursed from board-approved reserves. CFC's net earnings for determining allocations are based on CFC's non-GAAP adjusted net income, which excludes the impact of derivative forward value gains and losses.

The current policy of the CFC Board of Directors is to retire 50% of the prior year's allocated patronage capital and hold the remaining 50% for 25 years. The retirement amount and timing is subject to annual approval by the CFC Board of Directors.

In May 2023, the CFC Board of Directors authorized the allocation of \$1 million of net earnings for fiscal year 2023 to the cooperative educational fund. In July 2023, the CFC Board of Directors authorized the allocation of net earnings for fiscal year 2023 as follows: \$110 million to members in the form of patronage capital and \$140 million to the members' capital reserve. The amount of patronage capital allocated each year by the CFC Board of Directors is based on adjusted net income, which excludes the impact of derivative forward value gains (losses). See "Item 7. MD&A—Non-GAAP Financial Measures" for information on adjusted net income.

In July 2023, the CFC Board of Directors also authorized the retirement of allocated net earnings totaling \$72 million, of which \$55 million represented 50% of the patronage capital allocation for fiscal year 2023 and \$17 million represented the portion of the allocation from net earnings for fiscal year 1998 that had been held for 25 years pursuant to the CFC Board of Directors' policy. We expect to return the authorized patronage capital retirement amount of \$72 million to members in cash in the second quarter of fiscal year 2024. The remaining portion of the patronage capital allocation for fiscal year 2023 will be retained by CFC for 25 years pursuant to the guidelines adopted by the CFC Board of Directors in June 2009.

In May 2022, the CFC Board of Directors authorized the allocation of \$1 million of net earnings for fiscal year 2022 to the cooperative educational fund. In July 2022 the CFC Board of Directors authorized the allocation of net earnings for fiscal year 2022 as follows: \$89 million to members in the form of patronage capital and \$153 million to the members' capital reserve. In July 2022, the CFC Board of Directors also authorized the retirement of allocated net earnings totaling \$59 million, of which \$44 million represented 50% of the patronage capital allocation for fiscal year 2022 and \$15 million represented the portion of the allocation from net earnings for fiscal year 1997 that had been held for 25 years pursuant to the CFC Board of Directors' policy. The authorized patronage capital retirement amount of \$59 million was returned to members in cash in September 2022. The remaining portion of the amount allocated for fiscal year 2022 will be retained by CFC for 25 years under current guidelines adopted by the CFC Board of Directors in June 2009.

Future allocations and retirements of net earnings may be made annually as determined by the CFC Board of Directors with due regard for its financial condition. The CFC Board of Directors has the authority to change the current practice for allocating and retiring net earnings at any time, subject to applicable laws and regulations.

CFC's total equity includes noncontrolling interests, which consist of 100% of the equity of NCSC and RTFC, as the members of NCSC and RTFC own or control 100% of the interests in their respective companies. NCSC and RTFC also allocate annual net earnings, subject to approval by the board of directors for each company. The allocation of net earnings by NCSC and RTFC to members or board-approved reserves does not affect noncontrolling interests; however, the cash

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

retirement of amounts allocated to members or to disbursements from board-approved reserves results in a reduction to noncontrolling interests.

Allocation of Net Earnings and Retirement of Patronage Capital—RTFC

In accordance with District of Columbia cooperative law and its bylaws and board policies, RTFC allocates its net earnings to its patrons, to a cooperative educational fund and to a general reserve, if necessary. RTFC’s bylaws require that it allocate at least 1% of net income to a cooperative educational fund. Funds from the cooperative educational fund are disbursed annually to fund the teaching of cooperative principles and for other cooperative education programs. An allocation to the general reserve is made, if necessary, to maintain the balance of the general reserve at 50% of the membership fees collected. The remainder is allocated to borrowers in proportion to their patronage. RTFC retires at least 20% of its annual allocation, if any, to members in cash prior to filing the applicable tax return. Any additional amounts are retired as determined by the RTFC Board of Directors, taking into consideration RTFC’s financial condition.

Allocation of Net Earnings—NCSC

NCSC’s bylaws require that it allocate at least 0.25% of its net earnings to a cooperative educational fund and an amount to the general reserve required to maintain the general reserve balance at 50% of membership fees collected. Funds from the cooperative educational fund are disbursed annually to fund the teaching of cooperative principles and for other cooperative education programs.

Accumulated Other Comprehensive Income (Loss)

The following table presents, by component, changes in AOCI for the years ended May 31, 2023 and 2022 and the balance of each component as of the end of each respective period.

Table 11.2: Changes in Accumulated Other Comprehensive Income (Loss)

(Dollars in thousands)	Year Ended May 31,					
	2023			2022		
	Unrealized Gains on Derivative Hedges⁽¹⁾	Unrealized Losses on Defined Benefit Plans⁽²⁾	Total	Unrealized Gains on Derivative Hedges⁽¹⁾	Unrealized Losses on Defined Benefit Plans⁽²⁾	Total
Beginning balance	\$ 5,123	\$ (2,865)	\$ 2,258	\$ 1,718	\$ (1,743)	\$ (25)
Changes in unrealized gains (losses)	6,691	(213)	6,478	4,028	(1,409)	2,619
Realized (gains) losses reclassified to earnings	(712)	319	(393)	(623)	287	(336)
Ending balance	\$ 11,102	\$ (2,759)	\$ 8,343	\$ 5,123	\$ (2,865)	\$ 2,258

⁽¹⁾ Of the derivative gains reclassified to earnings, a portion is reclassified as a component of the derivative gains (losses) line item and the remainder is reclassified as a component of the interest expense line item on our consolidated statements of operations.

⁽²⁾ Reclassified to earnings as a component of the other non-interest expense line item presented on our consolidated statements of operations.

We expect to reclassify realized net gains of \$1 million attributable to derivative cash flow hedges from AOCI into earnings over the next 12 months.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NOTE 12—EMPLOYEE BENEFITS

National Rural Electric Cooperative Association (“NRECA”) Retirement Security Plan

CFC is a participant in the NRECA Retirement Security Plan (“the Retirement Security Plan”), a multiple-employer defined benefit pension plan. The employer identification number of the Retirement Security Plan is 53-0116145, and the plan number is 333. Plan information is available publicly through the annual Form 5500, including attachments. The Retirement Security Plan is a qualified plan in which all employees are eligible to participate upon completion of one year of service. Under this plan, participating employees are entitled to receive annually, under a 50% joint and surviving spouse annuity, 1.70% of the average of their five highest base salaries during their participation in the plan, multiplied by the number of years of participation in the plan.

The risks of participating in the multiple-employer plan are different from the risks of single-employer plans due to the following characteristics of the plan:

- Assets contributed to the multiple-employer plan by one participating employer may be used to provide benefits to employees of other participating employers.
- If a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers.
- If CFC chooses to stop participating in the plan, CFC may be required to pay a withdrawal liability representing an amount based on the underfunded status of the plan.

Because of the current funding status of the Retirement Security Plan, it is not subject to a certified zone status determination under the Pension Protection Act of 2006 (“PPA”). Based on the PPA target and PPA actuarial value of the plan assets, it was more than 80% funded as of January 1, 2023, 2022 and 2021. We made contributions to the Retirement Security Plan of \$5 million, \$5 million and \$4 million in fiscal years 2023, 2022 and 2021, respectively. In each of these years, our contribution represented less than 5% of total contributions made to the plan by all participating employers. Our contribution did not include a surcharge. CFC’s expense is limited to the annual premium to participate in the Retirement Security Plan. Because it is a multiple-employer plan, there is no funding liability for CFC for the plan. There were no funding improvement plans, rehabilitation plans implemented or pending, and no required minimum contributions. There are no collective bargaining agreements in place that cover CFC’s employees.

Executive Benefit Restoration Plan

We adopted a supplemental top-hat Executive Benefit Restoration (“EBR”) Plan, effective January 1, 2015. The EBR Plan is a nonqualified, unfunded plan maintained by CFC to provide retirement benefits to a select group of executive officers whose compensation exceeds Internal Revenue Service limits for qualified defined benefit plans. There is a risk of forfeiture if participants leave the company prior to becoming fully vested in the EBR Plan. This plan included seven and three participants as of May 31, 2023 and 2022, respectively.

We recognized net periodic pension expense for this plan of approximately \$1 million, \$1 million and \$2 million in fiscal years 2023, 2022 and 2021, respectively. The unfunded projected benefit obligation of this plan, which is included on our consolidated balance sheets as a component of other liabilities, was \$5 million as of both May 31, 2023 and 2022. CFC made contributions to the plan of \$1 million, \$2 million and \$1 million in fiscal years 2023, 2022 and 2021, respectively, for lump-sum settlement payments to fully vested participants of \$1 million, \$2 million and \$1 million in each respective year. Unrecognized pension costs recorded in accumulated other comprehensive income were \$3 million as of both May 31, 2023 and 2022. We expect to amortize less than \$1 million of the unrecognized pension costs as a component of our net periodic pension benefit expense in fiscal year 2024.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

As a result of the settlement payments in fiscal years 2023, 2022 and 2021, we recognized a settlement loss of less than \$1 million in both fiscal years 2023 and 2022, and a combined settlement and curtailment loss of approximately \$1 million in fiscal year 2021. The curtailment and settlement losses are recorded as a component of non-interest expense on our consolidated statements of operations.

Defined Contribution Plan

CFC offers a 401(k) defined contribution savings program, the 401(k) Pension Plan, to all employees who have completed a minimum of 1,000 hours of service in either the first 12 consecutive months or first full calendar year of employment. We contribute an amount up to 2% of an employee’s salary each year for all employees participating in the program with a minimum 2% employee contribution. We contributed approximately \$1 million to the plan in each of fiscal years 2023, 2022 and 2021.

NOTE 13—GUARANTEES

We guarantee certain contractual obligations of our members so they may obtain various forms of financing. We use the same credit policies and monitoring procedures in providing guarantees as we do for loans and commitments. If a member system defaults on its obligation to pay debt service, then we are obligated to pay any required amounts under our guarantees. Meeting our guarantee obligations satisfies the underlying obligation of our member systems and prevents the exercise of remedies by the guarantee beneficiary based upon a payment default by a member system. In general, the member system is required to repay any amount advanced by us with interest, pursuant to the documents evidencing the member system’s reimbursement obligation.

The following table displays the notional amount of our outstanding guarantee obligations, by guarantee type and by member class, as of May 31, 2023 and 2022.

Table 13.1: Guarantees Outstanding by Type and Member Class

(Dollars in thousands)	May 31,	
	2023	2022
Guarantee type:		
Long-term tax-exempt bonds ⁽¹⁾	\$ 98,405	\$ 122,150
Letters of credit ⁽²⁾⁽³⁾	538,393	450,354
Other guarantees	160,023	158,279
Total	\$ 796,821	\$ 730,783
Member class:		
CFC:		
Distribution	\$ 383,644	\$ 314,925
Power supply	380,382	378,516
Statewide and associate ⁽⁴⁾	17,532	13,372
CFC total	781,558	706,813
NCSC	15,263	23,970
Total	\$ 796,821	\$ 730,783

⁽¹⁾Represents the outstanding principal amount of long-term variable-rate guaranteed bonds.

⁽²⁾Reflects our maximum potential exposure for letters of credit.

⁽³⁾Under a hybrid letter of credit facility we had \$35 million of commitments that may be used for the issuance of letters of credit as of May 31, 2023.

⁽⁴⁾Includes CFC guarantees to NCSC and RTFC members totaling \$16 million and \$11 million as of May 31, 2023 and 2022, respectively.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

We guarantee debt issued in connection with the construction or acquisition of pollution control, solid waste disposal, industrial development and electric distribution facilities, classified as long-term tax-exempt bonds in the table above. We unconditionally guarantee to the holders or to trustees for the benefit of holders of these bonds the full principal, interest, and in most cases, premium, if any, on each bond when due.

We had guarantees outstanding totaling \$797 million and \$731 million as of May 31, 2023 and 2022, respectively. Guarantees under which our right of recovery from our members was not secured totaled \$535 million and \$466 million and represented 67% and 64% of total guarantees as of May 31, 2023 and 2022, respectively. We were not required to perform pursuant to any of our guarantee obligations during fiscal years 2023 or 2022.

Long-term tax-exempt bonds of \$98 million and \$122 million as of May 31, 2023 and 2022, respectively, consist of adjustable or variable-rate bonds that may be converted to a fixed rate as specified in the applicable indenture for each bond offering. We are unable to determine the maximum amount of interest that we may be required to pay related to the remaining adjustable and variable-rate bonds. Many of these bonds have a call provision that allows us to call the bond in the event of a default, which would limit our exposure to future interest payments on these bonds. Our maximum potential exposure generally is secured by mortgage liens on the members' assets and future revenue. If a member's debt is accelerated because of a determination that the interest thereon is not tax-exempt, the member's obligation to reimburse us for any guarantee payments will be treated as a long-term loan. The maturities for long-term tax-exempt bonds and the related guarantees extend through calendar year 2037.

Of the outstanding letters of credit of \$538 million and \$450 million as of May 31, 2023 and 2022, respectively, \$138 million and \$118 million were secured as of each respective date. The maturities for the outstanding letters of credit as of May 31, 2023 extend through calendar year 2043.

In addition to the letters of credit listed in the table above, under master letter of credit facilities in place as of May 31, 2023, we may be required to issue up to an additional \$126 million in letters of credit to third parties for the benefit of our members. All of our master letter of credit facilities were subject to material adverse change clauses at the time of issuance as of May 31, 2023. Prior to issuing a letter of credit, we would confirm that there has been no material adverse change in the business or condition, financial or otherwise, of the borrower since the time the master letter of credit facility was approved and confirm that the borrower is currently in compliance with the terms and conditions of the agreement governing the facility.

The maximum potential exposure for other guarantees was \$160 million and \$158 million as of May 31, 2023 and 2022, respectively, of which \$25 million was secured as of both May 31, 2023 and 2022. The maturities for these other guarantees listed in the table above extend through calendar year 2025.

In addition to the guarantees described above, we were also the liquidity provider for \$98 million of variable-rate tax-exempt bonds as of May 31, 2023, issued for our member cooperatives. While the bonds are in variable-rate mode, in return for a fee, we have unconditionally agreed to purchase bonds tendered or put for redemption if the remarketing agents are unable to sell such bonds to other investors. We were not required to perform as liquidity provider pursuant to these obligations during fiscal years 2023, 2022 or 2021.

Guarantee Liability

We recorded a total guarantee liability for noncontingent and contingent exposures related to guarantees and liquidity obligations of \$13 million as of both May 31, 2023 and 2022. The noncontingent guarantee liability, which pertains to our obligation to stand ready to perform over the term of our guarantees and liquidity obligations we have entered into or modified since January 1, 2003, and accounts for the substantial majority of our guarantee liability, totaled \$12 million as of both May 31, 2023 and 2022, respectively. The remaining amount pertains to our contingent guarantee exposures.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

The following table details the scheduled maturities of our outstanding guarantees in each of the five fiscal years following May 31, 2023 and thereafter:

Table 13.2: Guarantees Outstanding Maturities

(Dollars in thousands)	Amount Maturing
2024	\$ 252,082
2025	82,317
2026	191,422
2027	39,286
2028	109,820
Thereafter	121,894
Total	\$ 796,821

NOTE 14—FAIR VALUE MEASUREMENT

Fair value, also referred to as an exit price, is defined as the price that would be received for an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. The fair value accounting guidance provides a three-level fair value hierarchy for classifying financial instruments. This hierarchy is based on the markets in which the assets or liabilities trade and whether the inputs to the valuation techniques used to measure fair value are observable or unobservable. The fair value measurement of a financial asset or liability is assigned a level based on the lowest level of any input that is significant to the fair value measurement in its entirety. The levels, in priority order based on the extent to which observable inputs are available to measure fair value, are Level 1, Level 2 and Level 3. The accounting guidance for fair value measurements requires that we maximize the use of observable inputs and minimize the use of unobservable inputs in determining fair value. We describe the valuation technique for each level in “Note 1—Summary of Significant Accounting Policies.”

The following table presents the carrying value and estimated fair value of all of our financial instruments, including those carried at amortized cost, as of May 31, 2023 and 2022. The table also displays the classification level within the fair value hierarchy based on the degree of observability of the inputs used in the valuation technique for estimating fair value.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Table 14.1: Fair Value of Financial Instruments

(Dollars in thousands)	May 31, 2023		Fair Value Measurement Level		
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	\$ 198,936	\$ 198,936	\$ 198,936	\$ —	\$ —
Restricted cash	8,301	8,301	8,301	—	—
Equity securities, at fair value	35,494	35,494	35,494	—	—
Debt securities trading, at fair value	474,875	474,875	—	474,875	—
Deferred compensation investments	6,660	6,660	6,660	—	—
Loans to members, net	32,478,992	29,308,647	—	—	29,308,647
Accrued interest receivable	172,723	172,723	—	172,723	—
Derivative assets	460,762	460,762	—	460,762	—
Total financial assets	\$ 33,836,743	\$ 30,666,398	\$ 249,391	\$ 1,108,360	\$ 29,308,647
Liabilities:					
Short-term borrowings	\$ 4,546,275	\$ 4,547,333	\$ —	\$ 4,547,333	\$ —
Long-term debt	23,946,548	22,665,551	—	13,527,393	9,138,158
Accrued interest payable	212,340	212,340	—	212,340	—
Guarantee liability	12,973	12,475	—	—	12,475
Derivative liabilities	115,074	115,074	—	115,074	—
Subordinated deferrable debt	1,283,436	1,261,141	240,831	1,020,310	—
Members' subordinated certificates	1,223,126	1,223,126	—	—	1,223,126
Total financial liabilities	\$ 31,339,772	\$ 30,037,040	\$ 240,831	\$ 19,422,450	\$ 10,373,759

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

(Dollars in thousands)	May 31, 2022		Fair Value Measurement Level		
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	\$ 153,551	\$ 153,551	\$ 153,551	\$ —	\$ —
Restricted cash	7,563	7,563	7,563	—	—
Equity securities, at fair value	33,758	33,758	33,758	—	—
Debt securities trading, at fair value	566,146	566,146	—	566,146	—
Deferred compensation investments	6,710	6,710	6,710	—	—
Loans to members, net	29,995,826	28,595,111	—	—	28,595,111
Accrued interest receivable	111,418	111,418	—	111,418	—
Derivative assets	222,042	222,042	—	222,042	—
Total financial assets	\$ 31,097,014	\$ 29,696,299	\$ 201,582	\$ 899,606	\$ 28,595,111
Liabilities:					
Short-term borrowings	\$ 4,981,167	\$ 4,978,580	\$ —	\$ 4,978,580	\$ —
Long-term debt	21,545,440	21,106,750	—	12,248,695	8,858,055
Accrued interest payable	131,950	131,950	—	131,950	—
Guarantee liability	12,764	13,083	—	—	13,083
Derivative liabilities	128,282	128,282	—	128,282	—
Subordinated deferrable debt	986,518	960,869	250,800	710,069	—
Members' subordinated certificates	1,234,161	1,234,161	—	—	1,234,161
Total financial liabilities	\$ 29,020,282	\$ 28,553,675	\$ 250,800	\$ 18,197,576	\$ 10,105,299

Loans to Members, Net

Because of the interest rate repricing options we provide to borrowers on loan advances and other characteristics of our loans, there is no ready market from which to obtain fair value quotes or observable inputs for similar loans. As a result, we are unable to use the exit price to estimate the fair value of loans to members. We therefore estimate fair value for fixed-rate loans by discounting the expected future cash flows based on the current rate at which we would make a similar new loan for the same remaining maturity to a borrower. The assumed maturity date used in estimating the fair value of loans with a fixed rate for a selected rate term is the next repricing date because at the repricing date, the loan will reprice at the current market rate. The carrying value of our variable-rate loans adjusted for credit risk approximates fair value since variable-rate loans are eligible to be reset at least monthly.

The fair value of loans with different risk characteristics, specifically nonperforming and restructured loans, is estimated using collateral valuations or by adjusting cash flows for credit risk and discounting those cash flows using the current rates at which similar loans would be made by us to borrowers for the same remaining maturities. The fair value of loans held for sale is determined based on the cost, which approximates the fair value, as we sell these loans at par value, concurrently or within a short period of time with the closing of the loan or participation agreement. See below for information on how we estimate the fair value of certain individually evaluated loans.

Transfers Between Levels

We monitor the availability of observable market data to assess the appropriate classification of financial instruments within the fair value hierarchy and transfer between Level 1, Level 2 and Level 3 accordingly. Observable market data include but

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

is not limited to quoted prices and market transactions. Changes in economic conditions or market liquidity generally will drive changes in availability of observable market data. Changes in availability of observable market data, which also may result in changes in the valuation technique used, are generally the cause of transfers between levels. We did not have any transfers into or out of Level 3 of the fair value hierarchy during fiscal years ended May 31, 2023 and 2022.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following table presents the carrying value and fair value of financial instruments reported in our consolidated financial statements at fair value on a recurring basis as of May 31, 2023 and 2022, and the classification of the valuation technique within the fair value hierarchy. We did not have any assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs during the years ended May 31, 2023 and 2022.

Table 14.2: Assets and Liabilities Measured at Fair Value on a Recurring Basis

(Dollars in thousands)	May 31,					
	2023			2022		
	Level 1	Level 2	Total	Level 1	Level 2	Total
Assets:						
Equity securities, at fair value.....	\$ 35,494	\$ —	\$ 35,494	\$ 33,758	\$ —	\$ 33,758
Debt securities trading, at fair value	—	474,875	474,875	—	566,146	566,146
Deferred compensation investments	6,660	—	6,660	6,710	—	6,710
Derivative assets	—	460,762	460,762	—	222,042	222,042
Liabilities:						
Derivative liabilities.....	—	115,074	115,074	—	128,282	128,282

Below is a description of the valuation techniques we use to estimate fair value of our financial assets and liabilities recorded at fair value on a recurring basis, the significant inputs used in those techniques, if applicable, and the classification within the fair value hierarchy.

Equity Securities

Our investments in equity securities consist of investments in Farmer Mac Class A common stock and Series C preferred stock. These securities are reported at fair value in our consolidated balance sheets. We determine the fair value based on quoted prices on the stock exchange where the stock is traded. That stock exchange with respect to Farmer Mac Class A common stock is an active market based on the volume of shares transacted. Because quoted market prices are the key input in deriving fair value for these securities, the valuation methodology is classified as Level 1.

Debt Securities Trading

As discussed above in “Note 1—Summary of Significant Accounting Policies” our debt securities consist of investments in certificates of deposit with maturities greater than 90 days, commercial paper, corporate debt securities, municipality debt securities, commercial MBS, foreign government debt securities and other ABS and were classified as trading as of May 31, 2023. Management estimates the fair value of our debt securities utilizing the assistance of third-party pricing services. Methodologies employed, controls relied upon and inputs used by third-party pricing vendors are subject to management review when such services are provided. This review may consist of, in part, obtaining and evaluating control reports issued and pricing methodology materials distributed. We review the pricing methodologies provided by the vendors in order to determine if observable market information is being used to determine the fair value versus unobservable inputs. Investment securities traded in secondary markets are typically valued using unadjusted vendor prices. These investment securities, which include those measured using unadjusted vendor prices, are generally classified as Level 2 because the valuation

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

typically involves using quoted market prices for similar securities, pricing models, discounted cash flow analyses using significant observable market inputs where available or a combination of multiple valuation techniques for which all significant assumptions are observable in the market.

Deferred Compensation Investments

CFC offers a nonqualified 457(b) deferred compensation plan to highly compensated employees and board members. Such amounts deferred by employees are invested by the company. The deferred compensation investments are presented as other assets in the consolidated balance sheets in the other assets category at fair value. We calculate fair value based on the daily published and quoted net asset value. Because quoted market prices are the key input in deriving fair value for this plan, the valuation methodology is classified as Level 1.

Derivative Instruments

Our derivatives primarily consist of OTC interest rate swaps executed under master netting swap agreements that do not have readily available quoted market prices. We derive the fair value of our derivatives using a vendor provided derivative system, which is based on industry-standard discounted cash flow models. We rely primarily on market-observable inputs for these models, including market interest rates and forward swap yield curves, as well as the contractual terms of the derivative instrument, as of the valuation date. We include a credit risk valuation adjustment in our valuation of derivatives, which takes into consideration the effect of nonperformance credit risk of the counterparty or our own nonperformance risk and depends on whether the derivative instrument is in a gain, or asset, financial position or in a loss, or liability, financial position. We corroborate our derivative valuations by comparing the amounts to counterparty valuations and third-party pricing sources. We analyze and validate pricing variances, if material, among different external pricing sources. Because observable market data serve as the key inputs in valuing our interest rate swaps, the valuation methodology is classified as Level 2.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

We may be required, from time to time, to measure certain assets and liabilities at fair value on a nonrecurring basis on our consolidated balance sheets. These assets and liabilities are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances, such as in the application of the lower of cost or fair value accounting or when we evaluate assets for impairment. We did not have any assets or liabilities measured at fair value on a nonrecurring basis as of May 31, 2023 or May 31, 2022.

NOTE 15—VARIABLE INTEREST ENTITIES

NCSC and RTFC meet the definition of a VIE because they do not have sufficient equity investment at risk to finance their activities without financial support. CFC is the primary source of funding for NCSC and the sole source of funding for RTFC. Under the terms of management agreements with each company, CFC manages the business operations of NCSC and RTFC. CFC also unconditionally guarantees full indemnification for any loan losses of NCSC and RTFC pursuant to guarantee agreements with each company. CFC earns management and guarantee fees from its agreements with NCSC and RTFC.

All loans that require NCSC board approval also require CFC board approval. CFC is not a member of NCSC and does not elect directors to the NCSC board. If CFC becomes a member of NCSC, it would control the nomination process for one NCSC director. NCSC members elect directors to the NCSC board based on one vote for each member. NCSC is a Class C member of CFC. All loans that require RTFC board approval also require approval by CFC for funding under RTFC's credit facilities with CFC. CFC is not a member of RTFC and does not elect directors to the RTFC board. RTFC is a nonvoting associate of CFC. RTFC members elect directors to the RTFC board based on one vote for each member.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NCSC and RTFC creditors have no recourse against CFC in the event of a default by NCSC and RTFC, unless there is a guarantee agreement under which CFC has guaranteed NCSC or RTFC debt obligations to a third party. The following table provides information on incremental consolidated assets and liabilities of VIEs included in CFC's consolidated financial statements, after intercompany eliminations, as of May 31, 2023 and 2022.

Table 15.1: Consolidated Assets and Liabilities of Variable Interest Entities

(Dollars in thousands)	May 31,	
	2023	2022
Assets:		
Loans outstanding	\$ 1,444,662	\$ 1,178,479
Other assets	12,612	9,672
Total assets	\$ 1,457,274	\$ 1,188,151
Liabilities:		
Total liabilities	\$ 19,704	\$ 22,958

The following table provides information on CFC's credit commitments to NCSC and RTFC, and potential exposure to loss under these commitments as of May 31, 2023 and 2022.

Table 15.2: CFC Exposure Under Credit Commitments to NCSC and RTFC

(Dollars in thousands)	May 31,	
	2023	2022
CFC credit commitments to NCSC and RTFC:		
Total CFC credit commitments	\$ 5,500,000	\$ 5,500,000
Outstanding commitments:		
Borrowings payable to CFC ⁽¹⁾	1,428,886	1,158,583
Credit enhancements:		
CFC third-party guarantees	15,263	23,970
Other credit enhancements	2,038	4,044
Total credit enhancements ⁽²⁾	17,301	28,014
Total outstanding commitments	1,446,187	1,186,597
CFC credit commitments available ⁽³⁾	\$ 4,053,813	\$ 4,313,403

⁽¹⁾ Intercompany borrowings payable by NCSC and RTFC to CFC are eliminated in consolidation.

⁽²⁾ Excludes interest due on these instruments.

⁽³⁾ Represents total CFC credit commitments less outstanding commitments as of each period-end.

Under a loan and security agreement with CFC, NCSC has access to a \$1,500 million revolving line of credit and a \$1,500 million revolving term loan from CFC, which mature in 2067. Under a loan and security agreement with CFC, RTFC has access to a \$1,000 million revolving line of credit and a \$1,500 million revolving term loan from CFC, which mature in 2067. CFC loans to NCSC and RTFC are secured by all assets and revenue of NCSC and RTFC. CFC's maximum potential exposure, including interest due, for the credit enhancements totaled \$17 million. The maturities for obligations guaranteed by CFC extend through 2031.

**NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

NOTE 16—BUSINESS SEGMENTS

Our activities are conducted through three operating segments, which are based on each of the legal entities included in our consolidated financial statements: CFC, NCSC and RTFC. We report segment information for CFC separately; however, we aggregate segment information for NCSC and RTFC into one reportable segment because neither entity meets the quantitative materiality threshold for separate reporting under the accounting guidance governing segment reporting.

Basis of Presentation

We present the results of our business segments on the basis in which management internally evaluates operating performance to establish short- and long-term performance goals, develop budgets and forecasts, identify potential trends, allocate resources and make compensation decisions.

Business Segment Reporting Methodology

The results of our business segments are intended to present the separate results for each of the legal entities included in our consolidated financial statements. As discussed in “Note 15—Variable Interest Entities,” all of NCSC’s and RTFC’s funding is either provided by CFC or guaranteed by CFC, the terms and conditions of which are stipulated in a loan and security agreement and a guarantee agreement between CFC and each legal entity. Pursuant to the guarantee agreement, CFC unconditionally guarantees full indemnification to NCSC and RTFC for any credit losses. In addition, CFC manages the business operations of NCSC and RTFC under a management agreement that automatically renews on an annual basis unless the agreement is terminated by either party.

We report loans and interest and fees earned on loans based on the legal entity that holds the loans. CFC borrows from various sources to fund the operations of CFC, NCSC and RTFC, the cost of which is reflected in CFC’s interest expense. NCSC and RTFC each borrow from CFC to fund loans to their members, the cost of which is reported as interest expense by each legal entity. CFC charges NCSC and RTFC a management fee, which CFC reports as a component of fee and other income. NCSC and RTFC report the management fee charged by CFC as a component of non-interest expense. CFC and NCSC use derivatives, primarily interest rate swaps, to manage interest rate risk. Because we generally do not elect to apply hedge accounting to our interest rate swaps, changes in the fair value of our interest rate swaps are recorded in earnings in our consolidated total results of operations. However, management excludes the impact of derivative forward value gains and losses and includes the net periodic derivative cash settlement interest expense amounts as a component of interest expense in reporting our segment results of operations, which represents the only difference between the accounting and reporting for our business segment results of operations and our consolidated total results of operations.

Segment Results and Reconciliation

The following tables display segment results of operations for the years ended May 31, 2023, 2022 and 2021, assets attributable to each segment as of May 31, 2023 and 2022 and a reconciliation of total segment amounts to our consolidated total amounts.

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Table 16.1: Business Segment Information

(Dollars in thousands)	Year Ended May 31, 2023					
	CFC	NCSC and RTFC	Segments Total	Reclasses and Adjustments ⁽¹⁾	Intersegment Eliminations ⁽²⁾	Consolidated
Results of operations:						
Interest income	\$ 1,343,215	\$ 61,716	\$ 1,404,931	\$ —	\$ (53,202)	\$ 1,351,729
Interest expense	(1,036,499)	(53,211)	(1,089,710)	—	53,202	(1,036,508)
Derivative cash settlements interest income (expense)	34,021	(444)	33,577	(33,577)	—	—
Interest expense	(1,002,478)	(53,655)	(1,056,133)	(33,577)	53,202	(1,036,508)
Net interest income	340,737	8,061	348,798	(33,577)	—	315,221
Provision for credit losses	(603)	(935)	(1,538)	—	935	(603)
Net interest income after provision for credit losses	340,134	7,126	347,260	(33,577)	935	314,618
Non-interest income:						
Fee and other income	24,880	3,922	28,802	—	(10,668)	18,134
Derivative gains:						
Derivative cash settlements interest income	—	—	—	33,577	—	33,577
Derivative forward value gains	—	—	—	252,267	—	252,267
Derivative gains	—	—	—	285,844	—	285,844
Investment securities losses	(4,974)	—	(4,974)	—	—	(4,974)
Total non-interest income	19,906	3,922	23,828	285,844	(10,668)	299,004
Non-interest expense:						
General and administrative expenses	(107,209)	(10,522)	(117,731)	—	8,100	(109,631)
Losses on early extinguishment of debt	(117)	—	(117)	—	—	(117)
Other non-interest expense	(1,484)	(1,636)	(3,120)	—	1,633	(1,487)
Total non-interest expense	(108,810)	(12,158)	(120,968)	—	9,733	(111,235)
Income (loss) before income taxes	251,230	(1,110)	250,120	252,267	—	502,387
Income tax provision	—	(800)	(800)	—	—	(800)
Net income (loss)	\$ 251,230	\$ (1,910)	\$ 249,320	\$ 252,267	\$ —	\$ 501,587
May 31, 2023						
	CFC	NCSC and RTFC	Segments Total	Reclasses and Adjustments ⁽¹⁾	Intersegment Eliminations ⁽²⁾	Consolidated Total
Assets:						
Total loans outstanding	\$32,503,574	\$1,444,662	\$33,948,236	\$ —	\$ (1,428,887)	\$32,519,349
Deferred loan origination costs	12,737	—	12,737	—	—	12,737
Loans to members	32,516,311	1,444,662	33,960,973	—	(1,428,887)	32,532,086
Less: Allowance for credit losses	(53,094)	(3,670)	(56,764)	—	3,670	(53,094)
Loans to members, net	32,463,217	1,440,992	33,904,209	—	(1,425,217)	32,478,992
Other assets	1,520,456	77,628	1,598,084	—	(65,016)	1,533,068
Total assets	\$33,983,673	\$1,518,620	\$35,502,293	\$ —	\$ (1,490,233)	\$34,012,060

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in thousands)	Year Ended May 31, 2022					
	CFC	NCSC and RTFC	Segments Total	Reclasses and Adjustments ⁽¹⁾	Intersegment Eliminations ⁽²⁾	Consolidated Total
Results of operations:						
Interest income	\$ 1,133,173	\$ 43,295	\$ 1,176,468	\$ —	\$ (35,225)	\$ 1,141,243
Interest expense	(705,534)	(35,225)	(740,759)	—	35,225	(705,534)
Derivative cash settlements interest expense	(99,768)	(1,617)	(101,385)	101,385	—	—
Interest expense	(805,302)	(36,842)	(842,144)	101,385	35,225	(705,534)
Net interest income	327,871	6,453	334,324	101,385	—	435,709
Benefit for credit losses	17,972	3,334	21,306	—	(3,334)	17,972
Net interest income after benefit for credit losses	345,843	9,787	355,630	101,385	(3,334)	453,681
Non-interest income:						
Fee and other income	22,426	70	22,496	—	(5,303)	17,193
Derivative gains:						
Derivative cash settlements interest expense	—	—	—	(101,385)	—	(101,385)
Derivative forward value gains	—	—	—	557,867	—	557,867
Derivative gains	—	—	—	456,482	—	456,482
Investment securities losses	(30,179)	—	(30,179)	—	—	(30,179)
Total non-interest income	(7,753)	70	(7,683)	456,482	(5,303)	443,496
Non-interest expense:						
General and administrative expenses	(93,465)	(8,102)	(101,567)	—	6,381	(95,186)
Losses on early extinguishment of debt	(754)	—	(754)	—	—	(754)
Other non-interest expense	(1,552)	(2,256)	(3,808)	—	2,256	(1,552)
Total non-interest expense	(95,771)	(10,358)	(106,129)	—	8,637	(97,492)
Income (loss) before income taxes ...	242,319	(501)	241,818	557,867	—	799,685
Income tax provision	—	(1,148)	(1,148)	—	—	(1,148)
Net income (loss)	\$ 242,319	\$ (1,649)	\$ 240,670	\$ 557,867	\$ —	\$ 798,537

	May 31, 2022					
	CFC	NCSC and RTFC	Segments Total	Reclasses and Adjustments ⁽¹⁾	Intersegment Eliminations ⁽²⁾	Consolidated Total
Assets:						
Total loans outstanding	\$30,031,459	\$1,178,479	\$31,209,938	\$ —	\$ (1,158,584)	\$30,051,354
Deferred loan origination costs	12,032	—	12,032	—	—	12,032
Loans to members	30,043,491	1,178,479	31,221,970	—	(1,158,584)	30,063,386
Less: Allowance for credit losses	(67,560)	(2,735)	(70,295)	—	2,735	(67,560)
Loans to members, net	29,975,931	1,175,744	31,151,675	—	(1,155,849)	29,995,826
Other assets	1,245,884	97,394	1,343,278	—	(87,722)	1,255,556
Total assets	\$31,221,815	\$1,273,138	\$32,494,953	\$ —	\$ (1,243,571)	\$31,251,382

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in thousands)	Year Ended May 31, 2021					
	CFC	NCSC and RTFC	Segments Total	Reclasses and Adjustments ⁽¹⁾	Intersegment Eliminations ⁽²⁾	Consolidated Total
Results of operations:						
Interest income	\$ 1,108,543	\$ 43,632	\$ 1,152,175	\$ —	\$ (35,574)	\$ 1,116,601
Interest expense	(702,063)	(35,574)	(737,637)	—	35,574	(702,063)
Derivative cash settlements interest expense	(113,951)	(1,694)	(115,645)	115,645	—	—
Interest expense	(816,014)	(37,268)	(853,282)	115,645	35,574	(702,063)
Net interest income	292,529	6,364	298,893	115,645	—	414,538
Provision for credit losses	(28,507)	(3,163)	(31,670)	—	3,163	(28,507)
Net interest income after provision for credit losses	264,022	3,201	267,223	115,645	3,163	386,031
Non-interest income:						
Fee and other income	23,732	5,963	29,695	—	(10,766)	18,929
Derivative gains:						
Derivative cash settlements interest expense	—	—	—	(115,645)	—	(115,645)
Derivative forward value gains	—	—	—	621,946	—	621,946
Derivative gains	—	—	—	506,301	—	506,301
Investment securities gains	1,495	—	1,495	—	—	1,495
Total non-interest income	25,227	5,963	31,190	506,301	(10,766)	526,725
Non-interest expense:						
General and administrative expenses	(93,085)	(7,849)	(100,934)	—	6,229	(94,705)
Losses on early extinguishment of debt	(1,456)	—	(1,456)	—	—	(1,456)
Other non-interest expense	(1,619)	(1,374)	(2,993)	—	1,374	(1,619)
Total non-interest expense	(96,160)	(9,223)	(105,383)	—	7,603	(97,780)
Income (loss) before income taxes	193,089	(59)	193,030	621,946	—	814,976
Income tax provision	—	(998)	(998)	—	—	(998)
Net income (loss)	\$ 193,089	\$ (1,057)	\$ 192,032	\$ 621,946	\$ —	\$ 813,978

⁽¹⁾Consists of (i) the reclassification of net periodic derivative settlement interest expense amounts, which we report as a component of interest expense for business segment reporting purposes but is included in derivatives gains (losses) in our consolidated total results and (ii) derivative forward value gains and losses, which we exclude from our business segment results but is included in derivatives gains (losses) in our consolidated total results.

⁽²⁾Consists of intercompany borrowings payable by NCSC and RTFC to CFC and the interest related to those borrowings, management fees paid by NCSC and RTFC to CFC and other intercompany amounts, all of which are eliminated in consolidation.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Senior management, including the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934. At the end of the period covered by this Report, based on this evaluation process, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

The management of National Rural Utilities Cooperative Finance Corporation ("we," "our" or "us") is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Our internal control over financial reporting is designed under the supervision of management, including the Chief Executive Officer and Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that:

- (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets;
- (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of ours are being made only in accordance with authorizations of management and our directors;
- (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or dispositions of our assets that could have a material effect on our financial statements; and
- (iv) ensure disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by us in reports filed under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Any system of internal control, no matter how well designed, has inherent limitations, including but not limited to the possibility that a control can be circumvented or overridden and misstatements due to error or fraud may occur and not be detected. Also, because of changes in conditions, internal control effectiveness may vary over time. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our management assessed the effectiveness of internal control over financial reporting as of May 31, 2023. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework ("2013 Framework").

Based on management's assessment and those criteria, management believes that we maintained effective internal control over financial reporting as of May 31, 2023.

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to the rules of the U.S. Securities and Exchange Commission that permit us to furnish only management's report with this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

By: /s/ J. ANDREW DON
J. Andrew Don
Chief Executive Officer
August 2, 2023

By: /s/ YU LING WANG
Yu Ling Wang
Senior Vice President and Chief Financial Officer
August 2, 2023

By: /s/ PANKAJ SHAH
Pankaj Shah
Vice President and Controller
(Principal Accounting Officer)
August 2, 2023

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

(a) Directors

Name	Age	Director Since	Date Present Term Expires
David E. Felkel (President of CFC)	62	2018	2024
G. Anthony Norton (Vice President of CFC)	71	2019	2025
Mark A. Suggs (Secretary-Treasurer of CFC)	66	2020	2026
Charles A. Abel II	54	2022	2025
Anthony A. Anderson ⁽¹⁾	61	2021	2024
Thomas A. Bailey	80	2019	2025
Donnie Bidegain ⁽²⁾	45	2023	2026
Jared Echternach	51	2021	2024
Darick Eisenbraun ⁽²⁾	31	2023	2026
Timothy Eldridge	65	2021	2024
Bruce Anthony Everhart ⁽⁴⁾	67	2022	2026
Dennis Fulk	71	2019	2025
Barbara E. Hampton	61	2019	2025
William Keith Hayward	58	2020	2026
Michael Heinen	60	2021	2024
Bradley P. Janorschke	58	2019	2025
Anthony Larson	49	2020	2026
Shane Larson	60	2022	2025
Joseph D. Martin ⁽¹⁾	73	2023	2026
Brent McRae	63	2021	2024
John Metcalf	58	2021	2024
Kendall Montgomery	59	2020	2025
Jeffrey Allen Rehder	56	2020	2024
Marsha L. Thompson ⁽³⁾	68	2017	2023
Bruce A. Vitosh ⁽³⁾	62	2017	2023

⁽¹⁾ Pursuant to CFC's bylaws, NRECA determines the method of director election and length of term for the seat occupied by this director.

⁽²⁾ Director seated on June 19, 2023.

⁽³⁾ Director's term ended on June 19, 2023.

⁽⁴⁾ Elected in September 2022 and seated in October 2022 to fill a vacant seat. Director's first full three-year term began June 19, 2023.

Under CFC's bylaws, the board of directors shall be composed of the following individuals:

- 20 directors, which must include one general manager and one director of a member system from each of 10 districts (but no more than one director from each state except in a district where only one state has members);
- two directors designated by NRECA; and
- if the board determines at its discretion that an at-large director shall be elected, one at-large director who satisfies the requirements of an audit committee financial expert as defined by the Sarbanes-Oxley Act of 2002 and is a trustee, director, manager, chief executive officer or chief financial officer of a member.

The 20 district-level directors are each elected by a vote of the members within the district for which the director serves. The at-large director who satisfies the requirements of an audit committee financial expert is elected by the vote of all members. All CFC directors, other than the two directors designated by NRECA, are elected for a three-year term and can serve a

maximum of two consecutive terms. Each CFC member (other than associates) is entitled to one vote with respect to elections of directors in their districts.

(b) Executive Officers

Title	Name	Age	Held Present Office Since⁽¹⁾
President and Director	David E. Felkel	62	2023
Vice President and Director	G. Anthony Norton	71	2023
Secretary-Treasurer and Director	Mark A. Suggs	66	2023
Chief Executive Officer	J. Andrew Don	63	2021
Senior Vice President and Chief Financial Officer	Yu Ling Wang	48	2021
Senior Vice President and Chief Banking Officer	Joel Allen	57	2014
Senior Vice President and General Counsel	Nathan Howard	47	2022
Senior Vice President and Chief Corporate Affairs Officer	Brad L. Captain	53	2014
Senior Vice President and Chief Risk Officer	Gholam M. Saleh	51	2022
Senior Vice President and Chief Operating Officer	Gary Bradbury	52	2022
Senior Vice President, Relationship Management	Jill Maison	58	2023
Senior Vice President, Strategic Services	Mark Snowden ⁽²⁾	48	2022

⁽¹⁾ Refers to fiscal year.

⁽²⁾ Until March 31, 2023.

The President, Vice President and Secretary-Treasurer are elected annually by the board of directors at its first organizational meeting immediately following CFC’s annual membership meeting, each to serve a term of one year; the Chief Executive Officer serves at the pleasure of the board of directors; and the other Executive Officers serve at the pleasure of the Chief Executive Officer.

(c) Identification of Certain Significant Employees

Not applicable.

(d) Family Relationships

No family relationship exists between any director or executive officer and any other director or executive officer of the registrant.

(e) (1) and (2) Business Experience and Directorships

Following is biographical information about the business experience for each member of the CFC Board of Directors and executive officers.

Directors

Mr. Felkel has been president and CEO of Edisto Electric Cooperative, Inc. in Bamberg, South Carolina, since 1997. He has been a trustee on the Board of Trustees of Central Electric Power Cooperative since 1997. As the president and CEO of Edisto Electric Cooperative, Inc., Mr. Felkel has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Felkel has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Norton has served as a director of Snapping Shoals Electric Membership Corporation in Covington, Georgia, since 1993. Mr. Norton has also served as a director at Georgia Electric Membership Corporation in Tucker, Georgia, since 2009 and Georgia System Operations Corporation in Tucker, Georgia, since 2012. Mr. Norton owned and operated Conyers

Pharmacy in Conyers, Georgia, from 1982 to 2018. As a director of Snapping Shoals Electric Membership Corporation, Mr. Norton has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Norton has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Suggs has served as executive vice president and general manager of Pitt & Greene Electric Membership Corporation in Farmville, North Carolina, since September 1983. Mr. Suggs has served as a director of North Carolina Electric Membership Corporation in Raleigh, North Carolina, since 1984 and served as its president from 2015 to 2017. He has also served as a director of North Carolina Association of Electric Cooperatives in Raleigh, North Carolina, since 1984 and served as its president from 2010 to 2011. Additionally, Mr. Suggs has served as a director of Tarheel Electric Membership Association in Raleigh, North Carolina, since 1984. As executive vice president and general manager of Pitt & Greene Electric Membership Corporation, Mr. Suggs has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Suggs has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Abel has served as a director of Sangre de Cristo Electric Association in Buena Vista, Colorado, since June 2015, has variously served as treasurer or secretary since November 2015 and currently serves as treasurer of the board. He serves as a director of Tri-State Generation and Transmission Association in Westminster, Colorado, since April 2019 and currently serves on the Executive Committee, the Finance & Audit Committee, the Policy Review Committee and the Land & Water Committee. Additionally, Mr. Abel served as director of Western United Electric Supply from April 2017 through April 2019. In addition to being a self-employed Certified Public Accountant, Mr. Abel was employed by High Country Bank as a commercial loan officer from May 2019 through October 2020. Prior to May 2019, he was a majority equity owner and managing principal for Abel & Eggleston, CPAs, LLC since 2008. As a director of Sangre de Cristo Electric Association, Mr. Abel has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Abel has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Anderson has served as the general manager of Cherryland Electric Cooperative in Grawn, Michigan, from 2003 to 2023, as he retired from Cherryland Electric Cooperative in June 2023. Additionally, Mr. Anderson has served as a director of NRECA in Arlington, Virginia, since 2008 and has been its president since March 8, 2023. He has also served as director of the Michigan Electric Cooperative Association in Lansing, Michigan, since 2003. As the general manager of Cherryland Electric Cooperative, Mr. Anderson has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Anderson has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Bailey has served as a director of Vermont Electric Cooperative in Johnson, Vermont, since January 2004. From 2006 to 2015, Mr. Bailey served as board president of Vermont Electric Cooperative. He has operated a real estate investment business since 2009. As a director of Vermont Electric Cooperative, Mr. Bailey has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Bailey has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Bidegain has served as a director of Farmers' Electric Cooperative, Inc. of New Mexico in Clovis, New Mexico, since January 2009. Mr. Bidegain has served as a director of Western Farmers Electric Cooperative since 2013 and as its board president since 2021. He is a partner of T4 Cattle Company, LLC since 1996. Mr. Bidegain has owned and managed Bidegain Farms, LLC since 2003 and managed Sunny State Products, Inc. since 2022. As a director of Farmers' Electric Cooperative, Inc. of New Mexico, Mr. Bidegain has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Bidegain has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Echternach has been president and CEO of Beltrami Electric Cooperative Inc. in Bemidji, Minnesota, since 2016, and a director of Cooperative Development, LLC, its subsidiary, since 2016. He also served as CEO of North Itasca Electric Cooperative Inc. in Big Fork, Minnesota, from 2012 to 2016. Mr. Echternach has also served as president and director of the Greater Bemidji Economic Development Corporation in Bemidji, Minnesota, since 2016, and as a director of Security Bank USA in Bemidji, Minnesota, since 2020. As the president and CEO of Beltrami Electric Cooperative, Inc., Mr. Echternach

has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Echternach has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Eisenbraun has been chief executive officer of High Plains Power, Inc. in Riverton, Wyoming, since 2021. He also served as chief financial officer of Butte Electric Cooperative, Inc. in Newell, South Dakota, from 2015 to 2020. Mr. Eisenbraun has also served as a director of the City of Spearfish – Municipal Airport Board from 2018 to 2020, and as the vice president of the City of Spearfish City Council from 2019 to 2020. As the CEO of High Plains Power, Inc., Mr. Eisenbraun has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Eisenbraun has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Eldridge has served as a director of Fleming-Mason Energy Cooperative, Inc. in Flemingsburg, Kentucky, since 2000, and as a director of East Kentucky Power Cooperative, Inc. in Winchester, Kentucky, since 2014. Mr. Eldridge has also been Audit Committee chairman of Fleming-Mason Energy since 2014. He has served as a director of Citizens Bank located in Morehead, Kentucky, since 2013 and served as its Audit Committee chairman throughout that time. Since 2015, Mr. Eldridge has been a member-owner and Certified Public Accountant at Baldwin CPAs, PLLC in Flemingsburg, Kentucky. He has held his Kentucky CPA license since 1986. As a director of Fleming-Mason Energy Cooperative, Inc., Mr. Eldridge has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Eldridge has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Everhart has served as a director of RushShelby Energy Rural Electric Cooperative, Inc. in Manilla, Indiana, since July 2017. Mr. Everhart has also served on the Finance Committee of RushShelby Energy Rural Electric Cooperative, Inc. since July 2021. He has served as a Finance Committee member of the Indiana State Fair Commission, Hereford Legacy Fund and the Hereford Youth Foundation. Mr. Everhart was a vice president of Wells Fargo Bank from 1988 until 2018. As a director of RushShelby Energy Rural Electric Cooperative, Inc., Mr. Everhart has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Everhart has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Fulk has served as a director of Platte-Clay Electric Cooperative in Kearney, Missouri, since 1993, including serving as board president from 2000 to 2015. He served as a director of NW Electric Power Cooperative from 2004 until April 2019, serving as board vice president from 2011 to April 2019. Mr. Fulk also served as a director of the Association of Missouri Electric Cooperatives from 2000 until 2015, serving as board president from 2010 to 2011. As a director of Platte-Clay Electric Cooperative, Mr. Fulk has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Fulk has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mrs. Hampton currently serves as the president and CEO of Georgia Transmission Corporation in Tucker, Georgia, a position she began in January 2021. She served as the senior vice president and CFO of the organization from 2005 until moving to the CEO role. Mrs. Hampton has been a Certified Public Accountant since 1990. As president and CEO of Georgia Transmission Corporation, Mrs. Hampton has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mrs. Hampton has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board. We believe Mrs. Hampton's experience with accounting principles, financial reporting rules and regulations and evaluating financial results makes her qualified to serve as an audit committee financial expert as defined by Section 407 of the Sarbanes-Oxley Act of 2002 and as the chairperson of CFC's Audit Committee.

Mr. Hayward has served as the general manager and CEO of North East Mississippi Electric Power Association in Oxford, Mississippi, since February 2014. From July 2004 to January 2014, he served as its manager of Engineering and Operations. Mr. Hayward has also served as a director of SEDC, a software cooperative in Atlanta, Georgia, since 2014. As the general manager and CEO of North East Mississippi Electric Power Association, Mr. Hayward has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Hayward has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Heinen has been general manager and CEO of Jefferson Davis Electric Cooperative, Inc. in Jennings, Louisiana, since 1999. He has also served as a director of the Association of Louisiana Electric Cooperatives in Baton Rouge, Louisiana, since 1999. As the general manager of Jefferson Davis Electric Cooperative, Inc., Mr. Heinen has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Heinen has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Janorschke has been the general manager at Homer Electric Association, Inc. in Homer, Alaska, since 2004. He has also been the general manager of Alaska Electric and Energy Cooperative in Homer, Alaska, since 2004. Mr. Janorschke has also served on the Board of Trustees of the Northwest Public Power Association in Vancouver, Washington, since 2014. As the general manager of Homer Electric Association, Inc., Mr. Janorschke has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Janorschke has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Anthony Larson has served as a director of Slope Electric Cooperative, Inc. in New England, North Dakota, since June 2010, and as a director of Upper Missouri Power Cooperative in Sidney, Montana, since April 2020. Mr. Larson has served as an advisory board member of Dakotas America since September 2017, a director of Innovative Energy Alliance since January 2019 and a director of Maintenance Solutions Cooperative since January 2019, each of which provides services to electric cooperatives. In addition to being a self-employed rancher since 1986, Mr. Larson was an ambulatory care officer at West River Health Services from August 2016 to September 2019, and an agricultural banker at Dacotah Bank from October 2012 to January 2015. As a director of Slope Electric Cooperative, Inc., Mr. Larson has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Larson has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Shane Larson has served as the CEO of Rock Energy Cooperative in Janesville, Wisconsin, since August 2000. From 2013 to 2022, Mr. Larson served as a director of Federated Rural Electric Insurance Exchange in Shawnee, Kansas. He has also served as a director of Charge EV, LLC in Wisconsin, since 2021 and as its vice chairman in 2021. Mr. Larson served as a director of Wisconsin's Managers' Association from 2006 to 2008 and as its president in 2008. He was also a board member of Empower Energy from 2003 until 2004. As the CEO of Rock Energy Cooperative, Mr. Larson has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Larson has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Martin has served as a director of Mountain View Electric Association in Limon, Colorado, since 1988 and its board president since 1994. Mr. Martin has also served as a director of the NRECA Board of Directors since 2014, and has served as NRECA vice president since March 8, 2023. As a director of Mountain View Electric Association and NRECA, Mr. Martin has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Martin has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. McRae has served as a director of McCone Electric Cooperative, Inc. in Circle, Montana, since 2009. He also served as an alternate director of Central Montana Electric Power Cooperative, Inc. in Great Falls, Montana, from March 2018 to March 2021. Mr. McRae has served as a director of the Montana Electric Cooperatives' Association, Inc. in Great Falls, Montana, since 2011 and served as its board president from October 2013 until October 2021. He has been a self-employed rancher since 1989. As a director of McCone Electric Cooperative, Inc., Mr. McRae has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. McRae has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Metcalf has been president and CEO of Mid-Ohio Energy Cooperative Inc. in Kenton, Ohio, since 2003. He has also served as a director and vice chairman of Buckeye Power Inc. in Columbus, Ohio, since 2003, and has served on its Audit Committee since 2016. As the president and CEO of Mid-Ohio Energy Cooperative Inc., Mr. Metcalf has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Metcalf has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Montgomery has been general manager and CEO of Fort Belknap Electric Cooperative, Inc. in Olney, Texas, since August 2003. Additionally, Mr. Montgomery has been CEO of Fort Belknap Services Corporation, since August 2003, and CEO of Link Field Services, Inc. since August 2003, each subsidiaries of Fort Belknap Electric Cooperative, Inc. Mr. Montgomery has been an alternate director of Brazos Electric Power Cooperative, Inc. in Waco, Texas, since August 2003. He has also been a Certified Public Accountant since 1988. As the general manager and CEO of Fort Belknap Electric Cooperative, Inc., Mr. Montgomery has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Montgomery has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Rehder has served as a director of North West Rural Electric Cooperative in Orange City, Iowa, since 2005, and has served as its board president since 2012. He has served as a director of Rivers Edge Bank, in Marion, South Dakota, since 2007. Since 2007, he has also served as a director of First State Associates, a bank holding company in Hawarden, Iowa, and has served as its chairman since 2012. Since 2010, he has served as president of Rehder Farms Inc. and director of 3R Feedlots Inc. in Hawarden, Iowa. As a director of North West Rural Electric Cooperative, Mr. Rehder has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Rehder has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mrs. Thompson has served as a director of Trico Electric Cooperative in Marana, Arizona, since 2001, and has served as vice president of its board since 2019. Mrs. Thompson also serves as a member of Trico Electric Cooperative's Audit and Finance Committee and served as its chair from 2013 until 2015. Additionally, Mrs. Thompson has been a director of Grand Canyon State Electric Cooperative Association since 2002 and served as its board president from 2008 to 2010. As vice president of the board and a director of Trico Electric Cooperative, Mrs. Thompson has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mrs. Thompson has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Mr. Vitosh has been general manager and CEO of Norris Public Power District in Beatrice, Nebraska, since 2012. From 2008 to 2012, Mr. Vitosh was the manager of finance and accounting at Norris Public Power District. Mr. Vitosh is a CPA and is a member of the Nebraska Society of Certified Public Accountants. Mr. Vitosh has also been a self-employed farmer since 2004. As general manager and CEO of Norris Public Power District, Mr. Vitosh has acquired extensive experience with and knowledge of the rural electric cooperative industry and, therefore, we believe Mr. Vitosh has the qualifications, skills and experience necessary to act in the best interests of CFC and to serve as a director on the CFC board.

Executive Officers

Mr. Don joined CFC in September 1999 as Director of Loan Syndications and became Vice President of Capital Market Relations in June 2005. In June 2010, Mr. Don was named CFC's Senior Vice President and Treasurer, and on July 1, 2013, he became Senior Vice President and Chief Financial Officer. Effective May 3, 2021, Mr. Don assumed the position of Chief Executive Officer. Prior to joining CFC, he held the position of Vice President and Manager of the Washington, D.C. Office for The Bank of Tokyo-Mitsubishi. Mr. Don started his banking career with the Bank of Montreal in New York in 1984 and subsequently was a Vice President for Corporate Banking for The Bank of New York from 1987 to 1990.

Ms. Wang joined CFC in 1999. During her tenure, Ms. Wang has held various positions within the Company's finance department. Ms. Wang was named Vice President, Capital Markets in June 2017 after having served as Vice President, Capital Markets Relations since June 2012. Effective May 3, 2021, Ms. Wang became Senior Vice President and Chief Financial Officer.

Mr. Allen joined CFC in 1990. Throughout his career with CFC, Mr. Allen has held various positions. He served as a Director, Portfolio Management through 2010 and as Vice President, Portfolio Management from 2010 until April 2014, when he became Senior Vice President, Member Services. Effective February 1, 2023, Mr. Allen was named Senior Vice President and Chief Banking Officer.

Mr. Howard joined CFC in 2014 as Corporate Counsel in the Legal Services Group. He became Senior Corporate Counsel in 2015 and Assistant General Counsel in December 2020. Effective April 25, 2022, Mr. Howard became Senior Vice President and General Counsel. Prior to joining CFC, Mr. Howard spent over 10 years as an associate at three large law firms in New York and Washington, D.C. and three years as in-house counsel, including serving as Vice President and General Counsel for Greentech Automotive, a start-up electric vehicle manufacturer, from June 2011 to February 2013.

Mr. Captain joined CFC in 1999. He served as Vice President, Government Relations until 2010 when he became Vice President, Corporate Communications. In January 2014, Mr. Captain served as Vice President, Corporate Relations until April 2014 when he became Senior Vice President, Corporate Relations. Effective June 1, 2021, Mr. Captain became Senior Vice President and Chief Corporate Affairs Officer. Prior to joining CFC, he worked as a Special Assistant to the Undersecretary of Rural Development at the U.S. Department of Agriculture.

Mr. Saleh first joined CFC in August 1997 in the Treasury and Finance Group. He became the Director of Risk Management before leaving in November 2005 to pursue a career as Director of Asset-Liability Management at CapitalSource Inc., followed by an appointment as Director and Financial Industry Fellow at the Financial Industry Regulatory Authority in Washington, D.C., in October 2009. Mr. Saleh went abroad in December 2010 to focus on international banking examination, financial industry regulation and domestic and regional financial stability prior to returning to CFC in September 2016 as Vice President of Financial Risk Management. Effective June 1, 2021, Mr. Saleh was named Senior Vice President and Chief Risk Officer.

Mr. Bradbury joined CFC in May 2001. He served as Vice President, Internal Audit until June 2021, when he became Senior Vice President, Corporate Services. Effective August 1, 2022, Mr. Bradbury was named Senior Vice President and Chief Operating Officer. Prior to working at CFC, Mr. Bradbury was an Internal Audit Services Manager at PricewaterhouseCoopers from June 1998 to May 2001.

Mrs. Maison joined CFC in 2005 as an Associate Vice President. She held various positions in Credit Risk Management and G&T Lending from 2005 to June 2015. In June 2015, she became Regional Vice President, G&T until becoming Director, G&T Relationship Management in January 2019. From June 2021 until January 2023 she served as Vice President, G&T. On January 3, 2023, she was promoted to Senior Vice President, Relationship Management.

Mr. Snowden joined CFC in April 2022 as Senior Vice President, Strategic Services. Prior to working at CFC, Mr. Snowden served as CEO of Cimarron Electric Cooperative in Kingfisher, Oklahoma, since 2009. He began his career with the cooperative in 1998 in the Member Services department. Mr. Snowden served as a director on the Oklahoma Association of Electric Cooperatives board from 2009 to 2022, where he chaired the Legislative Committee. In addition, he was a member of the Oklahoma Association of Electric Cooperatives Managers Association, where he served as a past chairman. From 2009 to 2022, he served as an alternate director on the board of Western Farmers Electric Cooperative, and was an active member of the Western Farmers Electric Cooperative Managers Group, serving as a past chairman. Mr. Snowden departed CFC on March 31, 2023.

(f) Involvement in Certain Legal Proceedings

None to our knowledge.

(g) Promoters and Control Persons

Not applicable.

(h) Code of Ethics

We have adopted a Code of Ethics within the meaning of Item 406(b) of Regulation S-K. This Code of Ethics applies to our principal executive officer, principal financial officer and principal accounting officer. This Code of Ethics is publicly available on our website at www.nrucfc.coop (under the link "Investor Relations/Corporate Governance").

(i) Nominating Committee

Our board of directors does not have a standing nominating committee. As described above under “Item 10(a) Directors,” 20 of our directors are each elected by members in the district for which the director serves. To nominate director candidates, at the district meeting before the meeting at which candidates are to be elected from such district, a nominating committee is elected composed of one person from each state within the district. Each member of these nominating committees must be a trustee, director or manager of one of our members. Each district nominating committee then submits the names of two or more nominees for each position in the district for which an election is to be held. We provide members of nominating committees with director guidelines to use in reviewing applications from potential candidates. One or more candidates for the at-large director position who satisfies the requirements of an audit committee financial expert are nominated by our board of directors if the board determines that it is appropriate to fill the seat. Our board of directors believes that it is appropriate for the full board of directors to nominate this director because of the position’s specific qualification requirements and the lack of any local district qualification requirement.

While we do not have a formal policy regarding diversity, the director guidelines we provide to each district nominating committee specify that a variety of perspectives, opinions and backgrounds is critical to the board’s ability to perform its duties and various roles. We recognize the value of having a board that encompasses a broad range of skills, expertise, industry knowledge and diversity of professional and personal experience.

(j) Audit Committee

Our Audit Committee currently consists of twelve directors: Mrs. Hampton (Chairperson), Mr. Montgomery (Vice Chairperson), Mr. Felkel (Ex Officio), Mr. Abel, Mr. Eldridge, Mr. Everhart, Mr. Fulk, Mr. Janorschke, Mr. Anthony Larson, Mr. Shane Larson, Mr. Martin and Mr. Suggs. Mrs. Hampton was designated by the board as an “audit committee financial expert” as defined by Section 407 of the Sarbanes-Oxley Act of 2002. The members of the Audit Committee are “independent” as that term is defined in Rule 10A-3 under the Securities Exchange Act. Among other things, the Audit Committee reviews our financial statements and the disclosure under “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K. The Audit Committee meets with our independent registered public accounting firm, internal auditors, CEO and financial management executives to review the scope and results of audits and recommendations made by those persons with respect to internal and external accounting controls and specific accounting and financial reporting issues and to assess corporate risk. The board has adopted a written charter for the Audit Committee that may be found on our website, www.nrucfc.coop (under the link “Investor Relations/Corporate Governance”).

The Audit Committee completed its review and discussions with management regarding our audited financial statements for the year ended May 31, 2023. The Audit Committee has discussed with the independent auditors the matters required to be discussed by Auditing Standard No. 1301, and received from the independent accountants written disclosures and the letter from the independent accountant required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant’s communications with the Audit Committee concerning independence, and discussed with the accountants their independence.

Based on the review and discussions noted above, the Audit Committee recommended to the board that the audited financial statements be included in our Annual Report on Form 10-K for the year ended May 31, 2023 for filing with the U.S. Securities and Exchange Commission.

(k) Compensation Committee

Role of the Compensation Committee

Our Compensation Committee currently consists of seven directors: Mr. Eldridge, Mr. Felkel, Mrs. Hampton, Mr. Hayward, Mr. McRae, Mr. Norton and Mr. Suggs. The Compensation Committee of the board of directors reviews and makes appropriate recommendations to the full board of directors regarding CFC’s total compensation philosophy and pay components, including, but not limited to, base and incentive pay programs. The Compensation Committee is also responsible for approving the compensation, employment agreements and perquisites for the CEO. The Compensation Committee annually reviews all approved corporate goals and objectives relevant to compensation, evaluates performance in

light of those goals and approves the CEO's compensation based on this evaluation, all of which is then submitted to the full board of directors for ratification. The Compensation Committee has delegated authority to the CEO for evaluating the performance and approving the annual base compensation for all of the other named executive officers as identified in the "Summary Compensation Table" below. Other than the CEO, no other named executive officer makes decisions regarding executive compensation.

The Compensation Committee reports to the board of directors on its actions and recommendations following committee meetings and meets in executive session without members of management present when making specific compensation decisions. Although the board has delegated authority to the Compensation Committee with respect to CFC's executive and general employee compensation programs and practices, the full board of directors also reviews and ratifies CFC's compensation and benefit programs each year.

The Compensation Committee's charter can be found on our website at www.nrucfc.coop (under the link "Investor Relations/Corporate Governance").

The Compensation Committee's Processes

The Compensation Committee has established a process to assist in ensuring that CFC's executive compensation program is achieving its objectives. Prior to the start of each fiscal year, the board of directors approves performance measures for the "Corporate Balanced Scorecard," which is the basis for the annual incentive plan. The Compensation Committee reviews and assesses the accomplishment of goals as of the end of the fiscal year and determines whether to authorize the payment of incentive compensation. This authorization is then submitted to the full board of directors for ratification.

The CFC Board of Directors is provided an opportunity to rate the CEO's performance and provide feedback on competencies to include strategy, people, external stakeholders and leadership. The President, Vice President and Secretary-Treasurer of the board of directors meet annually with the CEO to review his performance based on the board assessment as well as individual achievements, contribution to CFC's performance and other leadership accomplishments. In determining the CEO's base pay, the Compensation Committee subjectively considers the results of the board performance assessment as well as a variety of corporate performance measures, including financial metrics, portfolio management, customer satisfaction and market share, industry leadership, and peer group compensation data provided by the compensation consultant, as discussed below.

Role of Compensation Consultant

In fiscal year 2023, the Compensation Committee hired Mercer (US) Inc. ("Mercer US") to advise it on the CEO's compensation as compared with the compensation of CEOs of peer group organizations. Through discussions with the Compensation Committee, Mercer US established a peer group of companies to use in assessing the competitiveness of the CEO's compensation (see "Compensation Analysis" in the "Compensation Discussion and Analysis" section below). Mercer US advised the Compensation Committee through an assessment of compensation data from this peer group using a one-year compensation analysis, which assesses CFC's CEO compensation and the compensation of peer CEOs for the most recent fiscal year. The elements of compensation reviewed include current base pay, target and actual annual incentives, actual long-term incentive granted as well as long-term incentive payouts, and total direct compensation. Mercer US did not determine or provide the Compensation Committee with a specific recommendation on any component of executive compensation; it only reviewed benchmark data and discussed what is generally occurring with executive compensation. During fiscal year 2023, Mercer US provided the Company services with respect to general compensation data and benefit administration. The decision to engage Mercer US was made by management and approved by the Compensation Committee. The aggregate fees paid to Mercer US for executive compensation services to the Compensation Committee during fiscal year 2023 were \$125,095.

In fiscal year 2023, the Compensation Committee conducted an evaluation of Mercer US' independence considering the relevant regulations of the U.S. Securities and Exchange Commission and the listing standards of the New York Stock Exchange, and concluded that the services performed by Mercer US raised no conflicts of interest. The Company does not believe that such additional services impair Mercer's ability to provide independent advice to the Compensation Committee or otherwise present a conflict of interest.

Role of Executive Officers

As described above, the Compensation Committee has delegated the authority for making base pay decisions for the other named executive officers to the CEO. The CEO exercises his judgment to set base pay rates, based on general market data, overall corporate performance and leadership accomplishments. For additional information about the CEO's role in compensation decisions, see "Base Pay" under the "Compensation Discussion and Analysis" section below.

(l) Section 16(a) Beneficial Ownership Reporting Compliance

Not applicable.

(m) Board Leadership Structure and Role of Risk Oversight by the Board of Directors

Board Leadership Structure

The positions of CEO and president of the CFC Board of Directors are held by two separate individuals. The president must be a member of the board of directors and is elected annually by the board of directors. The president of the CFC Board of Directors has authority, among other things, to appoint members of the board to standing committees, to appoint a vice chairperson to each board standing committee and to appoint members to ad-hoc board committees. The president of the board presides over board meetings, sets meeting agendas and determines materials to be distributed to the board. Accordingly, the board president has substantial ability to influence the direction of the board. CFC believes that separation of the positions of board president and CEO reinforces the independence of the board in its oversight of CFC's business and affairs. CFC also believes that this leadership structure is appropriate in light of the cooperative nature of the organization. The board of directors appoints the CEO. The CEO is not a member of the board of directors. If the CEO position becomes vacant, the board of directors will appoint an interim CEO who will exercise the responsibilities of the CEO until a permanent CEO is selected by the board of directors.

Board Role in Risk Oversight

The board of directors has responsibility for the oversight and strategic direction of CFC's Enterprise Risk Management ("ERM") framework. The board of directors has adopted a comprehensive risk-management policy that describes the roles and responsibilities of the board and management within an established framework for identifying and managing risks. The board of directors reviews the risk-management policy annually and updates it accordingly. The board of directors has also developed a risk-management philosophy, which is periodically assessed and, if appropriate, updated. It states CFC's set of shared beliefs and attitudes on how risk is considered from strategy development and implementation to our operations.

The board of directors' policy sets forth the primary objectives of CFC's ERM, which are to implement a process by which all important risks are identified, measured, assessed, managed and monitored in a comprehensive and effective manner; and to categorically group, inventory, analyze and oversee all relevant risks by way of a structured reporting and analytics framework for the board of directors and senior management.

The ERM framework is intended to provide a holistic view of key risks that may impact CFC's strategic objectives. ERM provides CFC with a process that allows CFC to become more anticipatory and effective at evaluating and managing uncertainties, objectively and proactively. The ERM process is focused on categorically measuring and assessing key risks across three broad groupings of risk, namely credit risk; financial risk; and operational risk. The process of assessing key risks is performed quarterly and within the context of CFC's strategic objectives, mission, values, culture, conservative risk-management philosophy and established risk guidelines. The framework provides a consistent approach for identifying CFC's key risks and determining appropriate responses in light of the board of directors' strategic objectives.

The board of directors periodically reviews important trends and emerging developments across key risks as assessed, measured and evaluated by management. The Chief Risk Officer is primarily accountable for the execution of the ERM responsibilities in accordance with established risk limits and guidelines where applicable and as established by corresponding risk owners and in alignment with the risk philosophy of the board of directors. Additionally, management is responsible for periodically evaluating the ERM framework, making regular reports to the board of directors about its

evaluation of the ERM framework, and proposing to the board of directors changes to the ERM process to reflect financial industry best practice.

In fulfilling its risk-management oversight duties, the board of directors receives periodic reports on business activities and risk-management activities from management, including but not limited to detailed risk assessment of (i) credit risk including an analysis of CFC's loan portfolio, counterparty credit risk exposure (e.g., derivatives counterparties) and the corporate investment portfolio; (ii) financial risk including an analysis of liquidity and funding risk, capital management and leverage, financial performance and interest rate risk; and (iii) operational risk with an analysis of cybersecurity, business operations and information technology, compliance, reputational and talent management. The periodic reports to the board of directors from management also include reports from various operating groups (e.g., Member Relations, Treasury Operations, Internal Audit, Information Technology and Legal Services), and committees across the organization (e.g., Corporate Credit Committee, Asset Liability Committee, Investment Management Committee and the Disclosure Committee). Management provides reports to the board of directors at each regularly scheduled board meeting, and more frequently as requested by the board of directors, relating to, among other things, the ongoing progress of managing risk at CFC given the ERM framework, management's responses for the critical business risks identified during the risk assessment process and the status of any gaps or deficiencies, and CFC's risk profile and trends, as well as emerging risks and opportunities.

Item 11. Executive Compensation

Compensation Discussion and Analysis

Executive Compensation Philosophy and Objectives

The components of our compensation package for the named executive officers (consisting of Mr. Don, Ms. Wang, Mr. Allen, Mr. Captain and Mr. Saleh) are consistent with those offered to all employees.

Our executive compensation program provides a balanced mix of compensation that incorporates the following key components:

- annual base pay;
- an annual cash incentive that is based on the combination of achievement of short-term (one-year) corporate goals and individual performance;
- a legacy three-year cash incentive that is based on the achievement of long-term corporate goals; and
- retirement, health and welfare and other benefit programs.

While all elements of executive compensation work together to provide a competitive compensation package, each element of compensation is determined independently of the other elements.

Our compensation philosophy is to provide a total compensation package for employees—base pay, annual incentive and benefits—that is competitive in the local employment market. However, due to the cooperative nature of the organization, CFC does not meet the total cash compensation levels of named executive officers of other financial services organizations since we do not offer stock or other equity compensation. It is important to CFC, however, to pay the named executive officers of CFC competitively in base pay to retain key talent.

Performance—Named executive officers receive base pay that is both market competitive and reflective of their role in developing, implementing and overseeing CFC's strategy and operations. The annual incentive component of compensation reflects both the performance of the organization and its success in achieving corporate performance metrics established by the board of directors and the executive officer's individual performance.

Retention—CFC's success is due in large part to the relationship between our employees and our members. This makes the retention of employees, including the named executive officers, vital to our business and long-term success. The compensation package, particularly the annual incentive plan's vesting component and the retirement benefits, assist in the retention of a highly qualified management team.

Compensation Analysis

In fiscal year 2023, Mercer US was engaged by the Compensation Committee to conduct a survey to provide compensation data for the CEO position using 13 peer organizations identified by Mercer US through discussions with the Compensation Committee. Mercer US included companies in the peer group that were similar to CFC in asset size, industry and business description. The peer group included financial institutions that are private market, commercial and/or mission-driven lenders, offering full-service financing, investment and related services. The companies targeted as peer companies included two members of the Farm Credit System and 11 regional banks and financial services companies. After reviewing the activity of the peer group of the prior year, New York Community Bancorp, Inc, Flagstar Bancorp, Inc. and People's United Financial, Inc. were removed from the peer group based on asset size or mergers and acquisitions activity.

The peer group companies had assets ranging from approximately 50% to 200% of CFC's November 30, 2022 total assets of \$33.0 billion. The peer group consisted of financial services organizations Nelnet, Inc.; Webster Financial Corporation; Hancock Whitney Corporation; Onemain Holdings, Inc.; BankUnited, Inc.; Synovus Financial Corporation; TFS Financial Corporation; Federal Agricultural Mortgage Corporation; Commerce Bancshares, Inc.; Rocket Companies, Inc.; and SLM Corporation as well as two Farm Credit System peers.

Mercer US led the Compensation Committee through an assessment of CEO compensation data for the peer group companies. Mercer US' data included both actual compensation and target compensation based on information obtained from each peer group company's most recent annual report or proxy statement.

The elements of compensation reviewed include:

- current base salary;
- target and actual annual incentive paid in fiscal year 2022;
- actual long-term incentive granted, which includes restricted stock awards (valued at face value on the date of grant), stock option awards (valued at grant date utilizing the Black-Scholes option pricing model), other long-term incentive target awards (valued at target value on date of award) and cash long-term incentive payouts (valued at actual payout on date of award if target value is not disclosed);
- sign-on awards, special awards and mega-grants annualized over the term of the employment contract or the vesting schedule; and
- annualized value of retirement, perquisites and other noncash compensation.

The Compensation Committee reviewed total compensation data for the peer group for informational purposes and used this data solely to determine the competitiveness of our CEO base pay.

In determining the base compensation paid to our other named executive officers, the CEO reviewed national, credible third-party compensation surveys (including the Mercer US Executive and CompAnalyst surveys) for financial services and other organizations of similar asset size as CFC in order to obtain a general understanding of current compensation practices and to ensure that the base pay component of compensation for the named executive officers other than the CEO is competitive with such institutions. CFC has often recruited non-CEO talent from industries outside the financial services sector. As a result, the CEO considers data from surveys covering a larger and broader group of for-profit companies in setting compensation for the other named executive officers than the Compensation Committee considers in setting compensation for the CEO. The CEO considered the data to gain a general understanding of current compensation practices at institutions of similar asset size to CFC; he did not review or consider underlying data pertaining to individual organizations comprising any of the survey groups. Instead, the CEO considered the aggregate compensation data to enhance his understanding of current practices in setting compensation at competitive levels.

Elements of Compensation

Base Pay—Our philosophy is to provide annual base pay that reflects the value of the job in the marketplace, as well as employee experience, skills and tenure within a salary range. To attract and retain a highly skilled workforce, we must remain competitive with the pay of other employers that compete with us for talent.

After reviewing the performance of the organization and the evaluation of the CEO's performance by each board member, it was the assessment of the Compensation Committee that the CEO and the organization performed extremely well during

[Table of Contents](#)

this business year. In fact, the business results met or exceeded company targets for many key metrics of performance, and the CEO continued to demonstrate outstanding leadership. Therefore, in recognition of his strong performance and leadership, the Committee increased the CEO's base pay to \$1,161,000 effective June 1, 2023.

As discussed under "Compensation Analysis" above, Mr. Don, in his capacity as the CEO, exercised his judgment to set the annual base pay for the other named executive officers based on general market data, overall company performance and individual leadership accomplishments.

Mr. Don determined that Ms. Wang, Mr. Allen, Mr. Captain and Mr. Saleh all performed well in their various roles as senior leaders of the organization. They each contributed to the achievement of corporate strategies and objectives in a positive and meaningful way. Ms. Wang and Mr. Saleh received merit increases to their base pay and Mr. Allen, Mr. Captain, and Mr. Saleh each received a one-time cash bonus. The increases and bonus are included in the total compensation table below.

Annual Incentive—Our annual cash incentive program for fiscal year 2023 is a one-year cash incentive that is tied to the annual performance of the organization as well as individual performance. We believe that by paying an incentive tied to the achievement of annual operating goals as well as individual performance, all employees, including named executive officers, will focus their efforts on the most important strategic objectives that will help us fulfill our mission to our members and our obligations to the financial markets while also exhibiting high levels of performance. Additionally, the annual incentive pay enhances our ability to provide competitive compensation while at the same time tying total compensation paid to the achievement of corporate goals. Every employee participates in the annual incentive program, and the corporate strategic goals are the same for all employees, including the named executive officers.

The annual incentive program provides maximum annual cash incentive opportunities based upon the level of the position within our base pay structure, ranging from 26% to 40% of base pay. Named executive officers are eligible to receive annual cash incentive compensation up to 40% of their base pay and are subject to a two-year vesting schedule for 20% of their achievement. The individual performance component of the plan is determined by the employee's performance rating, which is weighted between 0%-100%, and the level of their position within our base pay structure, which ranges between 20%-80% of the total annual incentive payout.

Our approach to establishing corporate goals for annual incentive compensation has not changed since the plan's inception. Corporate performance is measured using a balanced scorecard approved by the board of directors prior to the start of the fiscal year. The balanced scorecard is a performance management tool that articulates the corporate strategy into specific, quantifiable and measurable goals. The goals have always been tied to enhancing service to our member-owners while ensuring all aspects of the business are effectively managed.

The scorecard is divided into four quadrants, reflecting crucial areas of business performance. Specific goals are established within those quadrants to focus all employees on the target results and measures that must be achieved if we are to succeed at realizing our strategic plan. The intent is to align organizational, departmental and individual initiatives to achieve a common set of goals.

The four quadrants for fiscal year 2023, which were the basis for the annual short-term incentive payment, were Member Portfolios; Financial Ratios; Internal Process; and Employee Engagement. For fiscal year 2023, the board of directors established five corporate goals within these four quadrants. The board of directors establishes corporate goals and measures they believe are challenging but achievable if each individual performs well in their role and we meet our internal business plan goals.

The goals for fiscal year 2023 were:

- *Member Portfolio Management*: Two goals supporting expansion of member participation in CFC loan products and maintaining or increasing market share of borrowers in key segments of the loan portfolio.
- *Financial Ratio*: One goal supporting efforts to meet or exceed established financial targets to maintain CFC's financial strength.
- *Internal Process and Operations*: One goal focused on managing CFC's operating expense levels.

[Table of Contents](#)

- *Employee Engagement*: One goal focused on engaging and educating employees about the organization's purpose, products and services.

The determination of the extent to which the four goals were achieved and, therefore, the amount to be paid out under the annual incentive plan for fiscal year 2023 was confirmed by the board of directors in July 2023. The board determined that all five goals were achieved at 100%. Each goal carries a different weight varying between 10% and 30%, resulting in an aggregate payout of 100% of the total opportunity. CFC has a 10-year average payout of 17.52% of base salaries for all employees across both our legacy short-term incentive plan and the new annual incentive plan. The average payout of base salaries for all employees in the new fiscal year 2023 annual incentive plan is 27.22%.

Long-Term Incentive—The legacy long-term incentive program was a three-year plan tied to CFC's long-term strategic objectives. The long-term incentive program was implemented to create dynamic tension between short-term objectives and long-term goals. It served as a retention tool, helping us to keep key employees, and supports CFC's efforts to compensate its employees at market-competitive levels.

All individuals employed by CFC on the first day of fiscal year 2022, June 1, are participants in the remaining plan for the performance period beginning on that date. Under the long-term incentive program, performance units covering a three-year performance period were issued to each employee at the start of the fiscal year. The remaining long-term incentive is paid out in quarterly payments after the end of each fiscal quarter, subject to the employment status (or retirement, disability or death) of the participant by CFC on the date of payment. We sometimes refer to the three-year performance period as a plan cycle.

The performance measure for the remaining long-term incentive plan is the achievement of bond rating targets for our issuer credit ratings as rated by S&P Global Inc., Fitch Ratings Inc. and Moody's Investors Service rating agencies, as outlined in the plan document. The number of performance units awarded to each employee for each plan cycle is calculated by dividing a percentage, ranging from 15% to 25%, of the participant's base pay for the first fiscal year of the plan cycle by the payout value assigned to the target rating level.

As of June 1, 2023, there was one remaining long-term incentive plan in which named executive officers were participants. Coinciding with the implementation of the new annual incentive plan effective June 1, 2022, payout values for the performance units issued to all named executive officers in fiscal year 2022 were frozen at \$20 per performance unit. This plan will pay out on a quarterly basis during the fiscal year in which they were originally eligible to pay out. The long-term incentive plan program ended effective May 31, 2022 and was replaced by the vesting component of the new annual incentive plan.

Although we sunsetted the long-term incentive plan program effective May 31, 2022, we still believe that incorporating CFC's issuer credit rating into performance measurement is important, so we instituted a payout contingency for our fiscal year 2024 annual incentive plan. The corporate portion of the fiscal year 2024 incentive payout contingency would be capped at 50% for the named executive officers in the event that CFC's long-term unsecured credit rating is below an A rating (or equivalent) for two or more of the credit rating agencies at May 31, 2024.

Risk Assessment

The Compensation Committee conducts an annual risk assessment of the company's compensation policies and practices, particularly annual incentive plan goals, to ensure that the policies and practices do not encourage excessive risk. For fiscal year 2023 the Compensation Committee concluded that our compensation policies and practices are not reasonably likely to provide incentives for behavior that could have a material adverse effect on the company.

Benefits

An important retention tool is our defined benefit pension plan, the Retirement Security Plan. CFC participates in a multiple-employer pension plan managed by NRECA. We balance the effectiveness of this plan as a compensation and retention tool

[Table of Contents](#)

with the cost of the annual premium incurred to participate in this pension plan. The value of the pension benefit is determined by base pay only and does not include other cash compensation.

We also have an Executive Benefit Restoration Plan (“EBR”). The EBR is a plan for a select group of management, to increase their retirement benefits above amounts available under the Retirement Security Plan, which is restricted by Internal Revenue Service (“IRS”) limitations on annual pay levels and maximum annual annuity benefits. The EBR restores the value of the Retirement Security Plan for named executive officers to the level it would be if the IRS limits on annual pay and annual annuity benefits were not in place. Unlike the Retirement Security Plan, the EBR is an unfunded, unsecured obligation of CFC and is not qualified for tax purposes. Five of the named executive officers are participants in the EBR.

Under the EBR, we pay any amounts owed to the named executive officers for the restoration benefit once the risk of forfeiture has expired; amounts will be paid directly by CFC. We record an unfunded pension obligation and an offsetting adjustment to AOCI for this liability.

For more information on the Retirement Security Plan and the EBR, see “Pension Benefits Table” below.

As an additional retention tool designed to assist named executive officers in deferring compensation for use in retirement, each named executive officer is also eligible to participate in CFC’s nonqualified 457(b) deferred compensation savings plan. Contributions to this plan are limited by IRS regulations. The calendar year 2023 cap for contributions is \$22,500. There is no CFC contribution to the deferred compensation plan. For more information see “Nonqualified Deferred Compensation” below.

Other Compensation

We provide named executive officers with other benefits, as reflected in the All Other Compensation column in the “Summary Compensation Table” below, that we believe are reasonable and consistent with our compensation philosophy. We do not provide significant perquisites or personal benefits to the named executive officers.

The Compensation Committee considers perquisites for the CEO in connection with its annual review of the CEO’s total compensation package described above. The perquisites provided to Mr. Don are limited to an annual automobile allowance and an annual spousal air travel allowance to permit Mr. Don’s spouse to accompany him on business travel. To provide the automobile and spousal travel perquisites in an efficient fashion, the board of directors authorizes an annual allowance rather than providing unlimited reimbursement or use of a company-owned vehicle. The amount of each allowance is authorized annually by the board of directors and is determined based on the estimated cost for operation and maintenance of an automobile and the anticipated cost of air travel by the CEO’s spouse. For fiscal year 2023, the board of directors authorized an aggregate of \$50,000 to cover these two allowances.

Severance/Change-in-Control Agreements

Mr. Don has an executive agreement with CFC under which he may continue to receive compensation and benefits in certain circumstances after resignation or termination of employment. The value of his severance package was determined to be appropriate for a CEO and approved by the Compensation Committee as part of his employment contract. No other named executive officers have termination or change-in-control agreements. For more information on these severance arrangements, see “Termination of Employment and Change-in-Control Arrangements” below.

Compensation Committee Report

The Compensation Committee of the board of directors oversees CFC’s compensation program on behalf of the board. In fulfilling its oversight responsibilities, the Compensation Committee reviewed and discussed with management the “Compensation Discussion and Analysis” set forth in this Annual Report on Form 10-K. Based on this review and discussion, the Compensation Committee recommended to the board of directors that the “Compensation Discussion and Analysis” be included in this Form 10-K.

Submitted by the Compensation Committee:

Tim Eldridge
 David E. Felkel
 Barbara E. Hampton
 William Keith Hayward
 Brent McRae
 G. Anthony Norton
 Mark A. Suggs

Summary Compensation Table

The summary compensation table below sets forth the aggregate compensation for the fiscal years ended May 31, 2023, 2022 and 2021 earned by the named executive officers.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary</u>	<u>Bonus⁽¹⁾</u>	<u>Non-Equity Incentive Plan Compensation⁽²⁾</u>	<u>Change in Pension Value and Nonqualified Deferred Compensation Earnings⁽³⁾</u>	<u>All Other Compensation⁽⁴⁾</u>	<u>Total</u>
J. Andrew Don	2023	\$ 1,080,000	\$ —	\$ 371,760	\$ 420,554	\$ 59,100	\$ 1,931,414
Chief Executive Officer	2022	1,000,000	—	274,680	938,523	33,580	2,246,783
	2021	560,166	—	156,500	624,196	8,241	1,349,103
Yu Ling Wang	2023	440,000	—	154,200	—	7,933	602,133
Senior Vice President and Chief Financial Officer	2022	400,000	—	112,700	122,940	11,263	646,903
	2021	278,285	—	66,150	272,437	8,033	624,905
Joel Allen	2023	462,000	23,000	168,840	—	8,600	662,440
Senior Vice President and Chief Banking Officer	2022	462,000	—	135,300	262,385	8,983	868,668
	2021	420,000	—	117,750	709,253	8,400	1,255,403
Brad Captain	2023	426,000	25,000	148,044	—	6,100	605,144
Senior Vice President and Chief Corporate Affairs Officer	2022	426,000	—	124,000	226,343	6,258	782,601
Gholam M. Saleh	2023	395,000	10,000	140,040	—	6,183	551,223
Senior Vice President and Chief Risk Officer	2022	385,000	—	109,570	71,783	10,485	576,838

(1) Includes amounts given as one-time cash awards in lieu of or in addition to base pay increases. Details for 2023 can be found in “Elements of Compensation” in “Compensation Discussion and Analysis” above.

(2) Includes amounts earned during each respective fiscal year and payable as of May 31 under the long-term and annual incentive plans. For a discussion of the long-term and annual incentive plans, see “Elements of Compensation” in “Compensation Discussion and Analysis” above. The amounts earned by each named executive officer under these incentive plans are listed above.

(3) Represents the aggregate change in the actuarial present value of the accumulated pension benefit under NRECA Retirement Security Plan, the multiple-employer defined benefit pension plan in which CFC participates, during each respective fiscal year as calculated by NRECA. Ms. Wang had a negative change in pension value of \$357,787, Mr. Captain had a negative change of \$492,657, Mr. Allen had a negative change of \$760,347, and Mr. Saleh had a negative change of \$71,884.

(4) For Mr. Don for fiscal year 2023, includes perquisites comprising Mr. Don’s automobile allowance and his spousal air travel allowance. The annual automobile allowance is calculated based on estimated costs associated with maintenance, use and insurance of a personal automobile. The annual

[Table of Contents](#)

spousal travel allowance is calculated based on the anticipated air travel for Miss Nickodem (Mr. Don’s spouse) during the fiscal year. The remaining amounts included in this column represent CFC contributions on behalf of each named executive officer pursuant to the CFC 401(k) defined contribution plan and contributions to health savings accounts.

The following chart has the amounts paid to each named executive officer under the annual and long-term incentive plans in 2023 and short-term and long-term incentive plans for 2022 and 2021.

<u>Name</u>	<u>Year</u>	<u>Annual Incentive Plan⁽¹⁾</u>	<u>Annual Incentive Vested Portion⁽²⁾</u>	<u>Short-Term Incentive Plan⁽³⁾</u>	<u>Long-Term Incentive Plan</u>
J. Andrew Don.....	2023	\$ 345,600	\$ 86,400	\$ —	\$ 26,160
	2022			250,000	24,680
	2021			133,000	23,500
Yu Ling Wang.....	2023	140,800	35,200	—	13,400
	2022			100,000	12,700
	2021			54,150	12,000
Joel Allen.....	2023	147,800	36,960	—	21,000
	2022			115,500	19,800
	2021			99,750	18,000
Brad Captain.....	2023	129,504	32,376	—	18,540
	2022			106,500	17,500
Gholam M. Saleh.....	2023	126,400	31,600	—	13,640
	2022			96,250	13,320

⁽¹⁾ Includes amounts equal to 80% of the total opportunity achieved and paid within the fiscal year earned.

⁽²⁾ Includes amounts equal to 20% of the total opportunity achieved and will be paid two years following the end of the fiscal year in which it was earned.

⁽³⁾ The last short-term incentive plan payout was May 31, 2022.

Grants of Plan-Based Awards

We have a long-term and an annual incentive plan for all employees, under which the named executive officers may receive a cash incentive up to 25% and 40% of salary, respectively. The incentive payouts are based on the executive officer’s salary for the fiscal year in which the program becomes effective. See the “Compensation Discussion and Analysis” above for further information on these incentive plans.

The following table contains the estimated possible payouts under annual incentive plan and possible future payouts for grants issued under our long-term incentive plan during the year ended May 31, 2023.

Name	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			
	Grant Date	Target	Maximum	Estimated Actual ⁽¹⁾
J. Andrew Don				
Long-Term Incentive Plan	June 1, 2021	\$ 250,000	\$ 375,000	\$ 50,000
Annual Incentive Plan ⁽²⁾		334,800	432,000	432,000
Yu Ling Wang				
Long-Term Incentive Plan	June 1, 2021	100,000	150,000	20,000
Annual Incentive Plan ⁽²⁾		136,400	176,000	176,000
Joel Allen				
Long-Term Incentive Plan	June 1, 2021	115,500	173,250	23,100
Annual Incentive Plan ⁽²⁾		143,220	184,800	184,800
Brad Captain				
Long-Term Incentive Plan	June 1, 2021	106,500	159,750	21,300
Annual Incentive Plan ⁽²⁾		132,060	170,400	161,880
Gholam M. Saleh				
Long-Term Incentive Plan	June 1, 2021	96,300	144,450	19,260
Annual Incentive Plan ⁽²⁾		122,450	158,000	158,000

⁽¹⁾ Target payouts for the long-term incentive plan are calculated using unit values of \$100 based on our goal of achieving an average long-term senior secured credit rating of A+ stable as of the end of the respective fiscal years. The fiscal year 2021 long-term incentive plan was frozen at a unit value of \$20 and will be paid out at that value in fiscal year 2024. Estimated actual payouts are calculated based on this value. See the “Compensation Discussion and Analysis” above for further information on this incentive plans.

⁽²⁾ Target and maximum payouts represent 31% and 40% of February 28, 2023 base salary. For the payout earned under the fiscal year 2023 annual incentive plan, see the Non-Equity Incentive Plan Compensation column of the “Summary Compensation Table” above.

Employment Contracts

Pursuant to an employment agreement executed on March 20, 2021, CFC employs Mr. Don as Chief Executive Officer effective May 3, 2021 until May 31, 2024 unless extended as provided by the terms of the contract or unless otherwise terminated in accordance with the terms of the Agreement. The Agreement provides that CFC shall pay Mr. Don a base salary at an annual rate of not less than \$1,000,000 per annum plus such incentive payments (if any) as may be awarded him. In addition, pursuant to the Agreement, Mr. Don is entitled to certain payments in the event of his termination other than for cause (e.g., Mr. Don leaving for good reason, disability or termination due to death). See “Termination of Employment and Change-in-Control Arrangements” below for a description of these provisions and for information on these amounts.

Pension Benefits Table

CFC is a participant in a multiple-employer defined benefit pension plan, the Retirement Security Plan, which is administered by NRECA. Since this plan is a multiple-employer plan in which CFC participates, CFC is not liable for the amounts shown in the table below and such amounts are not reflected in CFC’s audited financial statements. CFC’s expense is limited to the annual premium to participate in the Retirement Security Plan. There is no funding liability for CFC for this plan.

The Retirement Security Plan is a qualified plan in which all employees are eligible to participate upon completion of one year of service. Each of the named executive officers participates in the qualified pension plan component of the Retirement Security Plan. Under the current pension plan, participants are entitled to receive annually, under a 50% joint and surviving spouse annuity, 1.70% of the average of their five highest base salaries during their participation in the Retirement Security Plan, multiplied by the number of years of participation in the plan. The value of the pension benefit is determined by base pay only and does not include other cash compensation. Normal retirement age under the qualified pension plan is age 65; however, the plan does allow for early retirement with reduced benefits beginning at age 55. For early retirement, the

pension benefit will be reduced by 1/15 for each of the first five years and 1/30 for each of the next five years by which the elected early retirement date precedes the normal retirement date. CFC reduced the value of the pension plan effective September 1, 2010. Benefits accrued prior to September 1, 2010, are based on a benefit level of 1.90% of the average of their five highest base salaries during their participation in the Retirement Security Plan and a normal retirement age of 62.

CFC also offers an EBR. Five of the named executive officers participate in the EBR. The purpose of this plan is to increase the retirement benefits above amounts available under the Retirement Security Plan, which is restricted by IRS limitations on annual pay levels and maximum annual annuity benefits. The EBR restores the value of the Retirement Security Plan for the participating officers to the level it would be if the IRS limits on annual pay and annual annuity benefits were not in place.

The benefit and payout formula under these restoration plans is similar to that under the qualified Retirement Security Plan. Two of the named executive officers have reached their vesting date in accordance with provisions of the EBR plan. As a result, they no longer have a risk of forfeiture of the benefit under the EBR plan. Distributions are made from these plans to those named executive officers annually. The details of these distributions are shown in the Pension Benefits table below.

The following table contains the years of service, the present value of the accumulated benefit for the named executive officers listed in the “Summary Compensation Table” as of May 31, 2023, as calculated by NRECA and distributions from the plans for the fiscal year then ended.

Name	Plan Name	Number of Years of Credited Service ⁽¹⁾	Present Value of Accumulated Benefit ⁽²⁾	Payments During Last Fiscal Year ⁽³⁾
J. Andrew Don	NRECA Retirement Security Plan	22.66	\$ 2,437,654	\$ 837,265
Yu Ling Wang	NRECA Retirement Security Plan	21.66	880,690	—
Joel Allen	NRECA Retirement Security Plan	31.66	2,874,136	—
Brad Captain	NRECA Retirement Security Plan	23.33	1,433,667	—
Gholam M. Saleh	NRECA Retirement Security Plan	6.75	243,886	—

⁽¹⁾ CFC is a participant in a multiple-employer pension plan. Credited years of service, therefore, includes not only years of service with CFC, but also years of service with another cooperative participant in the multiple-employer pension plan. All named executive officers have credited years of service only with CFC.

⁽²⁾ Amount represents the actuarial present value of the named executive officer’s accumulated benefit under this plan as of May 31, 2023, as provided by the plan administrator, NRECA, using interest rates ranging from 1.94% to 3.09% per annum and mortality according to tables prescribed by the IRS as published in Revenue Rulings 2001-62 and 2007-67.

⁽³⁾ Distributions during fiscal year 2023 were as a result of named executive officers no longer being at risk of forfeiture with respect to these amounts provided under the EBR plan for Mr. Don, Ms. Wang, Mr. Allen, Mr. Captain and Mr. Saleh continue to have a risk of forfeiture of the benefits under the EBR; therefore, no payments have been made.

Nonqualified Deferred Compensation

The CFC deferred compensation plan is a nonqualified deferred compensation savings program for the senior executive group, including each of the named executive officers, and other select management or highly compensated employees designated by CFC. Participants may elect to defer up to the lesser of 100% of their compensation for the year or the applicable IRS statutory dollar limit in effect for that calendar year. The calendar year 2023 cap for contributions is \$22,500. During the three plan years immediately prior to the date a participant attains normal retirement age, participants may be eligible for a statutory catch-up provision that allows them to defer more than the annual contribution limit. Compensation for the purpose of this plan is defined as the total amount of compensation, including incentive pay, if any, paid by CFC. CFC does not make any contributions to this plan.

[Table of Contents](#)

The accounts are credited with “earnings” based on the participants’ selection of available investment options (currently, nine options) within the Homestead Funds. When a participant ceases to be an employee for any reason, distribution of the account will generally be made in 15 substantially equal annual payments beginning approximately 60 days after termination (unless an election is made to change the form and timing of the payout). The participant may elect either a single lump sum or substantially equal annual installments paid over no less than two and no more than 14 years. The amount paid is based on the accumulated value of the account.

The following table summarizes information related to the nonqualified deferred compensation plan in which the named executive officers listed in the “Summary Compensation Table” were eligible to participate during fiscal year ended May 31, 2023.

Name	Executive Contributions in Last Fiscal Year ⁽¹⁾	Registrant Contributions in Last Fiscal Year	Aggregate Earnings in Last Fiscal Year	Aggregate Withdrawals/Distributions	Aggregate Balance at Last Fiscal Year-End
J. Andrew Don	\$ 48,000	\$ —	\$ 9,867	\$ —	\$ 232,236
Yu Ling Wang	—	—	568	—	20,071
Joel Allen	—	—	—	—	—
Brad Captain	20,400	—	57,517	—	1,084,752
Gholam M. Saleh	—	—	—	—	—

⁽¹⁾Executive contributions are also included in the fiscal year 2023 Salary column in the “Summary Compensation Table” above.

Termination of Employment and Change-in-Control Arrangements

Mr. Don has an executive agreement with CFC under which he may continue to receive base salary and benefits in certain circumstances after resignation or termination of employment. No other named executive officers have termination or change-in-control agreements.

Mr. Don

Under the executive agreement with Mr. Don, if CFC terminates his employment without “cause” or Mr. Don terminates his employment for “good reason” (each term as defined below), CFC is obligated to pay him, in substantially equal monthly installments over the 12-month period following the termination of employment, an amount equal to the product of two times the sum of (i) his annual base salary at the rate in effect at the time of termination and (ii) the short-term incentive earned if any, for the year prior to the year in which such termination occurs.

Assuming a triggering event on May 31, 2023, the compensation payable to Mr. Don for termination without cause would be \$3,024,000. The actual payments due on a termination without cause on different dates could materially differ from this estimate.

For purposes of Mr. Don’s executive agreement, “cause” generally means (i) the willful and continued failure by Mr. Don to perform his duties under the agreement or comply with written policies of CFC, (ii) willful conduct materially injurious to CFC or (iii) conviction of a felony involving moral turpitude. “Good reason” generally means (i) a reduction in the rate of Mr. Don’s base salary, (ii) a decrease in his titles, duties or responsibilities, or the assignment of new responsibilities which, in either case, is materially less favorable to Mr. Don when compared with his titles, duties and responsibilities that were in effect immediately prior to such assignment or (iii) the relocation of CFC’s principal office or the relocation of Mr. Don to a location more than 50 miles from the principal office of CFC.

This estimate does not include amounts to which the named executive officer would be entitled to upon termination, such as base salary to date, unpaid bonuses earned, unreimbursed expenses, paid vacation time and any other earned benefits under company plans.

Chief Executive Officer Pay Ratio

The fiscal year 2023 compensation ratio of the median annual total compensation of all of our employees to the annual total compensation of our Chief Executive Officer is as follows:

<u>Category and Ratio</u>	<u>Total Compensation</u>
Median annual total compensation of all employees (excluding Chief Executive Officer)	\$ 149,392
Annual total compensation of J. Andrew Don, Chief Executive Officer	1,931,414
Ratio of the median annual total compensation of all employees to the annual total compensation of J. Andrew Don, Chief Executive Officer	12.93:1.0

In determining the median employee, a listing was prepared of all active employees of CFC as of March 31, 2023. We did not make any assumptions, adjustments or estimates with respect to total compensation. We did not annualize the compensation for any part-time employees or those who were not employed by us for the full 10-month portion of the fiscal year. We determined the compensation of our median employee by (i) taking the total gross compensation earned fiscal year-to-date for all active employees as of March 31, 2023 and (ii) ranking the total gross compensation of all employees, except the Chief Executive Officer, from lowest to highest.

After identifying the median employee, we calculated annual total compensation for such employee using the same methodology we use for our named executive officers as set forth in the above Summary Compensation Table.

Director Compensation Table

Directors receive an annual fee for their service on the CFC board. Additionally, the directors receive reimbursement for reasonable travel expenses. The fee is paid on a monthly basis and reimbursement for travel expenses is paid following the conclusion of each board meeting.

Below is a summary of the total compensation earned by each of CFC's directors during fiscal year ended May 31, 2023.

[Table of Contents](#)

Name	Total Fees Earned
Anthony A. Anderson	\$ 60,000
Anthony Larson	60,000
Barbara E. Hampton	65,000
Bradley P. Janorschke	65,000
Brent McRae	60,000
Bruce A. Vitosh	70,000
Bruce Everhart	40,000
Charles Abel II	60,000
Chris D. Christensen	50,000
David E. Felkel	70,000
Dennis Fulk	65,000
G. Anthony Norton	70,000
Jared Echternach	60,000
Jeffrey Allen Rehder	60,000
John Metcalf	60,000
Joseph Martin	15,000
Kendall Montgomery	60,000
Kevin M. Bender	15,000
Mark A. Suggs	65,000
Marsha L. Thompson	60,000
Michael J. Heinen	60,000
Shane L. Larson	60,000
Thomas A. Bailey	60,000
Timothy Eldridge	60,000
William Keith Hayward	60,000

Compensation Committee Interlocks and Insider Participation

There were no compensation committee interlocks or insider participation related to executive compensation during fiscal year ended May 31, 2023.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Not applicable.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Review and Approval of Transactions with Related Persons

Our board of directors has established a written policy governing related-person transactions. The policy covers transactions between CFC, on the one hand, and its directors, executive officers or key employees and their immediate family members and entities of which any of our directors, executive officers or key employees (i) is an officer, director, trustee, alternative director or trustee or employee, (ii) controls or (iii) has a substantial interest. Under this policy, a related-person transaction is any transaction in excess of \$120,000 in which CFC was, is or is proposed to be a direct or indirect participant in which a related person had, has or will have a direct or indirect material interest in the transaction. Related-person transactions do not include compensation or expense reimbursement arrangements with directors, officers or key employees (notwithstanding that officer compensation may be disclosed in “Item 13. Certain Relationships and Related Transactions, and Director Independence” in our Annual Report on Form 10-K, elsewhere in the CFC’s periodic reports filed with the SEC or otherwise disclosed publicly as a related-person transaction), transactions where the related person’s interest arises

only from the person's position as a director of another entity that is a party to the transaction, and transactions deemed to be related credits. Related-person transactions are subject to review by the Executive Committee of the board of directors (excluding any interested director), based on whether the transaction is fair and reasonable to CFC and consistent with the best interests of CFC and its members.

Related credits are extensions of credit to, or for the benefit of, related persons and entities that are made on substantially the same terms as, and follow underwriting procedures that are no less stringent than, those prevailing at the time for comparable transactions generally offered by CFC. Related credits are not subject to the procedures for transactions with related persons because we were established for the very purpose of extending financing to our members. We, therefore, enter into loan and guarantee transactions with members of which our officers and directors are officers, directors, trustees, alternative directors or trustees, or employees in the ordinary course of our business. All related credits are reviewed from time to time by our internal Corporate Credit Committee, which monitors our extensions of credit, and our independent third-party reviewer, which reviews our credit-extension policies on an annual basis. All loans, including related credits, are approved in accordance with an internal credit approval matrix, with each level of risk or exposure potentially escalating the required approval from our lending staff to management, a credit committee or the board of directors. Related credits of \$250,000 or less are generally approved by our lending staff or internal Corporate Credit Committee. Any related credit in excess of \$250,000 requires approval by the full board of directors, except that any interested directors may not participate, directly or indirectly, in the credit approval process, and the CEO has the authority to approve emergency lines of credit and certain other loans and lines of credit. Notwithstanding the related-person transaction policy, the CEO will extend such loans and lines of credit in qualifying situations to a member of which a CFC director was a director or officer, provided that all such credits are underwritten in accordance with prevailing standards and terms. Such situations are typically weather related and must meet specific qualifying criteria. To ensure compliance with this policy, no related persons may be present in person or by teleconference while a related credit is being considered. Under no circumstances may we extend credit to a related person or any other person in the form of a personal loan.

As a cooperative, CFC was established for the very purpose of extending financing to its members, from which our directors must be drawn. Loans and guarantees to member systems of which directors of CFC are officers, directors, trustees, alternative directors or trustees, or employees, are made in the ordinary course of CFC business on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other members and that do not involve more than normal risk of uncollectibility or present other unfavorable features. It is anticipated that, consistent with its loan and guarantee policies in effect from time to time, additional loans and guarantees will be made by CFC to member systems and trade and service organizations of which directors of CFC or their immediate family members (i) are officers, directors, trustees, alternative directors or trustees or employees, (ii) control or (iii) have a substantial beneficial interest. CFC has adopted a policy whereby substantially all extensions of credit to such entities are approved only by the disinterested directors.

Related-Person Transactions

The following table contains the total compensation earned by CFC's executive officers during the year ended May 31, 2023 who are not named executive officers but meet the definition of a "related person" as described above. Total compensation disclosed below is made up of the same components included in the "Summary Compensation Table" under "Item 11. Executive Compensation."

Name and Principal Position	Total Compensation
Gary Bradbury Senior Vice President and Chief Operating Officer	\$ 518,755
Nathan Howard Senior Vice President and General Counsel	421,880
Mark Snowden Senior Vice President, Strategic Services	394,502
Jill Maison Senior Vice President, Relationship Management	393,613

Independence Determinations

The board of directors has determined the independence of each director based on a review by the full board. The Audit Committee is subject to the independence requirements of Rule 10A-3 under the Securities Exchange Act. To evaluate the independence of our directors, the board has voluntarily adopted categorical independence standards consistent with the New York Stock Exchange (“NYSE”) standards. However, because we only list debt securities on the NYSE, we are not subject to most of the corporate governance listing standards of the NYSE, including the independence requirements.

No director is considered independent unless the board has affirmatively determined that he or she has no material relationship with CFC, either directly or as a partner, shareholder or officer of an organization that has a relationship with CFC. Material relationships can include banking, legal, accounting, charitable and familial relationships, among others. In addition, a director is not considered independent if any of the following relationships existed:

- (i) the director is, or has been within the last three years, an employee of CFC or an immediate family member is, or has been within the last three years, an executive officer of CFC;
- (ii) the director has received, or has an immediate family member who has received, during any 12-month period within the last three years, more than \$120,000 in direct compensation from CFC, other than director and committee fees and pension or other forms of deferred compensation for prior service (provided that such compensation is not contingent in any way on continued service);
- (iii) (a) the director or an immediate family member is a current partner of a firm that is CFC’s internal or external auditor; (b) the director is a current employee of such a firm; (c) the director has an immediate family member who is a current employee of such a firm and personally works on CFC’s audit; or (d) the director or an immediate family member was within the last three years (but is no longer) a partner or employee of such a firm and personally worked on CFC’s audit within that time;
- (iv) the director or an immediate family member is, or has been within the last three years, employed as an executive officer of another company where any of CFC’s present executive officers at the same time serves or served on that company’s compensation committee; or
- (v) the director is a current employee, or an immediate family member is a current executive officer, of a company that has made payments to, or received payments from, CFC for property or services in an amount which, in any of the last three fiscal years, exceeds the greater of \$1 million, or 2% of such other company’s consolidated gross revenue.

The board of directors also reviewed directors’ responses to a questionnaire asking about their relationships with CFC and its affiliates (and those of their immediate family members) and other potential conflicts of interest.

Based on the criteria above, the board of directors has determined that the directors listed below are independent for the period of time served by such directors during fiscal year 2023. The board determined that none of the directors listed below had any of the relationships listed in (i)—(v) above or any other material relationship that would compromise their independence.

Independent Directors

Charles A. Abel II	Thomas A. Bailey	Kevin M. Bender ⁽¹⁾
Chris D. Christensen ⁽²⁾	Jared Echternach	Timothy Eldridge
Bruce Anthony Everhart	David E. Felkel	Dennis Fulk
Barbara E. Hampton	Anthony Larson	Brent McRae
Joseph Martin	John Metcalf	Kendall Montgomery
G. Anthony Norton	Jeffrey Allen Rehder	Mark A. Suggs
Marsha L. Thompson ⁽³⁾	Bruce A. Vitosh ⁽³⁾	

(1) This director served during fiscal year 2023; until August 10, 2022.

(2) This director served during fiscal year 2023; however, he was no longer a director as of March 2023.

(3) This director served during fiscal year 2023; however, he/she was no longer a director as of June 2023.

Item 14. Principal Accountant Fees and Services

CFC's Audit Committee is solely responsible for the nomination, approval, compensation, evaluation and discharge of the independent public accountants. The independent registered public accountants report directly to the Audit Committee, and the Audit Committee is responsible for the resolution of disagreements between management and the independent registered public accountants. Consistent with U.S. Securities and Exchange Commission requirements, the Audit Committee has adopted a policy to pre-approve all audit and permissible non-audit services provided by the independent registered public accountants, provided such services do not impair the independent public accountant's independence.

KPMG, LLP was our independent registered public accounting firm for the fiscal years ended May 31, 2023 and 2022. KPMG, LLP has advised the Audit Committee that they are independent accountants with respect to the Company, within the meaning of standards established by the Public Company Accounting Oversight Board and federal securities laws administered by the U.S. Securities and Exchange Commission. The following table displays the aggregate estimated or actual fees for professional services provided by KPMG, LLP in fiscal years 2023 and 2022, including fees for the 2023 and 2022 audits. All services for fiscal years 2023 and 2022 were pre-approved by the Audit Committee.

(Dollars in thousands)	Year Ended May 31,	
	2023	2022
Description of fees:		
Audit fees ⁽¹⁾	\$ 2,159	\$ 1,811
Audit related fees ⁽²⁾	13	12
Tax fees ⁽³⁾	8	27
Total.....	<u>\$ 2,180</u>	<u>\$ 1,850</u>

⁽¹⁾ Audit fees for fiscal years 2023 and 2022 consist of fees for the quarterly reviews of our interim financial information and the audit of our annual consolidated financial statements and fees for the preparation of the stand-alone financial statements for RTFC and NCSC. Audit fees for fiscal years 2023 and 2022 also include comfort letter fees and consents related to debt issuances and compliance work required by the independent auditors.

⁽²⁾ Audit related fees for fiscal years 2023 and 2022 consist of fees for certain agreed-upon procedures.

⁽³⁾ Tax fees consist of assistance with matters related to tax compliance and consulting.

PART IV

Item 15. Exhibit and Financial Statement Schedules

(a) Financial Statement Schedules

The following documents are filed as part of this Report in Part II, Item 8 and are incorporated herein by reference.

1. Consolidated Financial Statements	Page
Report of Independent Registered Public Accounting Firm	83
Consolidated Statements of Operations for the Years Ended May 31, 2023, 2022 and 2021	86
Consolidated Statements of Comprehensive Income for the Years Ended May 31, 2023, 2022 and 2021	87
Consolidated Balance Sheets as of May 31, 2023 and 2022	88
Consolidated Statements of Changes in Equity for the Years Ended May 31, 2023, 2022 and 2021	89
Consolidated Statements of Cash Flows for the Years Ended May 31, 2023, 2022 and 2021	90
Notes to Consolidated Financial Statements	92

2. Schedules

None.

(b) Exhibits

The following exhibits are incorporated by reference or filed herewith.

EXHIBIT INDEX

Exhibit No.	Description
3.1	— Articles of Incorporation. Incorporated by reference to Exhibit 3.1 to our Form 10-K filed on August 28, 2014.
3.2	— Amended Bylaws as approved by CFC’s members on August 14, 2020. Incorporated by reference to Exhibit 3.2 to our Form 10-Q filed on October 15, 2020.
4.1	— Description of Securities.
4.2	— Form of Capital Term Certificate.
4.3	— Indenture dated February 15, 1994, between the Registrant and First Bank National Association as trustee. Incorporated by reference to Exhibit 4.2 to our Form 10-Q filed on October 15, 2007.
4.4	— Form of indenture between CFC and Mellon Bank, N.A., as Trustee. Incorporated by reference to Exhibit 4.1 to Registration Statement on Form S-3 filed on November 14, 1995 (Registration No. 33-64231).
4.5	— Indenture dated as of December 15, 1987, between CFC and Chemical Bank, as Trustee. Incorporated by reference to Exhibit 4.1 to Registration Statement on Form S-3ASR filed on November 24, 2008 (Registration No. 333-155631).
4.6	— First Supplemental Indenture between CFC and Chemical Bank, as Trustee. Incorporated by reference to Exhibit 4.2 to Registration Statement on Form S-3 filed on April 5, 1995 (Registration No. 33-58445).
4.7	— Form of indenture dated May 15, 2000, between the Registrant and Bank One Trust Company, National Association, as trustee. Incorporated by reference to Exhibit 4.1 to Registration Statement on Form S-3 filed on May 25, 2000 (Registration No. 333-37940).
4.8	— First Supplemental Indenture dated March 12, 2007, between the Registrant and U.S. Bank National Association, as successor trustee. Incorporated by reference to Exhibit 4.2 to Registration Statement on Form S-3ASR filed on April 19, 2007 (Registration No. 333-142230).
4.9	— Indenture dated October 25, 2007, between the Registrant and U.S. Bank National Association, as trustee. Incorporated by reference to Exhibit 4.1 to Registration Statement on Form S-3ASR filed on October 26, 2007 (Registration No. 333-146960).
4.10	— Indenture dated October 15, 1996, between the Registrant and U.S. Bank National Association, as successor trustee. Incorporated by reference to Exhibit 4.1 to Form 8-K filed on October 28, 1996.
10.1^	— Plan Document for CFC’s Deferred Compensation Pension Restoration Plan amended and restated effective January 1, 2015.
10.2^	— Plan Document for CFC’s Deferred Compensation Program amended and restated February 1, 2014. Incorporated by reference to Exhibit 10.6 to our Form 10-K filed on August 28, 2014.
10.3^	— Plan Document for CFC’s Executive Benefit Restoration Plan dated December 9, 2014. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on April 13, 2015.
10.4^	— Employment Agreement, entered into and effective as of March 10, 2021, between the Company and J. Andrew Don. Incorporated by reference to Exhibit 10.1 to our Form 8-K filed on March 11, 2021.
10.5^	— Supplemental Executive Retirement Plan of the Company, effective January 1, 2015. Incorporated by reference to Exhibit 10.2 to our Form 8-K filed on December 23, 2014.
10.6	— Amended and Restated Revolving Credit Agreement dated as of October 20, 2022 maturing on November 28, 2025. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on January 13, 2023.
10.7	— Amended and Restated Revolving Credit Agreement dated as of October 20, 2022 maturing on November 28, 2026. Incorporated by reference to Exhibit 10.2 to our Form 10-Q filed on January 13, 2023.
10.8	— Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated June 14, 2005 for up to \$1,000,000,000. Incorporated by reference to Exhibit 4.12 to our Form 10-K filed on August 24, 2005.
10.9	— Series A Future Advance Bond from the Registrant to the Federal Financing Bank dated June 14, 2005 for up to \$1,000,000,000 maturing on July 15, 2028. Incorporated by reference to Exhibit 4.15 to our Form 10-K filed on August 24, 2005.
10.10	— Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated April 28, 2006 for up to \$1,500,000,000. Incorporated by reference to Exhibit 4.11 to our Form 10-K filed on August 25, 2006.

Table of Contents

Exhibit No.	Description
10.11	— Series B Future Advance Bond from the Registrant to the Federal Financing Bank dated April 28, 2006 for up to \$1,500,000,000 maturing on July 15, 2029. Incorporated by reference to Exhibit 4.14 to our Form 10-K filed on August 25, 2006.
10.12	— Series C Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated September 19, 2008 for up to \$500,000,000. Incorporated by reference to Exhibit 4.29 to our Form 10-Q filed on October 14, 2008.
10.13	— Series C Future Advance Bond from the Registrant to the Federal Financing Bank dated September 19, 2008 for up to \$500,000,000 maturing on October 15, 2031. Incorporated by reference to Exhibit 4.32 to our Form 10-Q filed on October 14, 2008.
10.14	— Series D Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of November 10, 2010 for up to \$500,000,000. Incorporated by reference to Exhibit 4.1 to our Form 10-Q filed on January 14, 2011.
10.15	— Series D Future Advance Bond from the Registrant to the Federal Financing Bank dated as of November 10, 2010 for up to \$500,000,000 maturing on October 15, 2033. Incorporated by reference to Exhibit 4.4 to our Form 10-Q filed on January 14, 2011.
10.16	— Series E Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of December 1, 2011 for up to \$499,000,000. Incorporated by reference to Exhibit 10.3 to our Form 10-Q filed on January 17, 2012.
10.17	— Series E Future Advance Bond from the Registrant to the Federal Financing Bank dated as of December 1, 2011 for up to \$499,000,000 maturing on October 15, 2034. Incorporated by reference to Exhibit 10.6 to our Form 10-Q filed on January 17, 2012.
10.18	— Series F Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of December 13, 2012 for up to \$424,286,000. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed in January 14, 2013.
10.19	— Series F Future Advance Bond from the Registrant to the Federal Financing Bank dated as of December 13, 2012 for up to \$424,286,000 maturing on October 15, 2035. Incorporated by reference to Exhibit 10.4 to our Form 10-Q filed in January 14, 2013.
10.20	— Series G Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of November 21, 2013 for up to \$500,000,000. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed in January 13, 2014.
10.21	— Series G Future Advance Bond from the Registrant to the Federal Financing Bank dated as of November 21, 2013 for up to \$500,000,000 maturing on October 15, 2036. Incorporated by reference to Exhibit 10.3 to our Form 10-Q filed in January 13, 2014.
10.22	— Series H Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of November 18, 2014 for up to \$250,000,000. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on January 14, 2015.
10.23	— Series H Future Advance Bond from the Registrant to the Federal Financing Bank dated as of November 18, 2014 for up to \$250,000,000 maturing on October 15, 2034. Incorporated by reference to Exhibit 10.3 to our Form 10-Q filed on January 14, 2015.
10.24	— Series K Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of March 29, 2016 for up to \$250,000,000. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on April 4, 2016.
10.25	— Series K Future Advance Bond from the Registrant to the Federal Financing Bank dated as of March 29, 2016 for up to \$250,000,000 maturing on January 15, 2039. Incorporated by reference to Exhibit 10.2 to our Form 10-Q filed on April 4, 2016.
10.26	— Series L Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of December 1, 2016 for up to \$375,000,000. Incorporated by reference to Exhibit 10.3 to our Form 10-Q filed on January 13, 2017.
10.27	— Series L Future Advance Bond from the Registrant to the Federal Financing Bank dated as of December 1, 2016 for up to \$375,000,000 maturing on October 15, 2039. Incorporated by reference to Exhibit 10.4 to our Form 10-Q filed on January 13, 2017.
10.28	— Series M Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of November 9, 2017 for up to \$750,000,000. Incorporated by reference to Exhibit 10.03 to our Form 10-Q filed on January 11, 2018.
10.29	— Series M Future Advance Bond from the Registrant to the Federal Financing Bank dated as of November 9, 2017 for up to \$750,000,000 maturing on July 15, 2042. Incorporated by reference to Exhibit 10.04 to our Form 10-Q filed on January 11, 2018.

Table of Contents

Exhibit No.	Description
10.30	— Series N Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of November 15, 2018 for up to \$750,000,000. Incorporated by reference to Exhibit 10.3 to our Form 10-Q filed on January 11, 2019.
10.31	— Series N Future Advance Bond from the Registrant to the Federal Financing Bank dated as of November 15, 2018 for up to \$750,000,000 maturing on July 15, 2043. Incorporated by reference to Exhibit 10.3 to our Form 10-Q filed on January 11, 2019.
10.32	— Series P Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of February 13, 2020 for up to \$500,000,000. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on April 10, 2020.
10.33	— Series P Future Advance Bond from the Registrant to the Federal Financing Bank dated as of April 10, 2020 for up to \$500,000,000 maturing on July 15, 2054. Incorporated by reference to Exhibit 10.2 to our Form 10-Q filed on April 10, 2020.
10.34	— Series R Bond Purchase Agreement between the Registrant, Federal Financing Bank and Rural Utilities Service dated as of November 19, 2020 for up to \$375,000,000. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed January 12, 2021.
10.35	— Series R Future Advance Bond from the Registrant to the Federal Financing Bank dated as of November 19, 2020 for up to \$375,000,000 maturing on July 15, 2055. Incorporated by reference to Exhibit 10.2 to our Form 10-Q filed January 12, 2021.
10.36	— Series S Bond Purchase Agreement between the Registrant, the Federal Financing Bank and Rural Utilities Service dated as of November 4, 2021 for up to \$550,000,000. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed January 14, 2022.
10.37	— Series S Future Advance Bond from the Registrant to the Federal Financing Bank dated as of November 4, 2021 for up to \$550,000,000 maturing on July 15, 2056. Incorporated by reference to Exhibit 10.2 to our Form 10-Q filed January 14, 2022.
10.38	— Series T Bond Purchase Agreement between the Registrant, the Federal Financing Bank and Rural Utilities Services dated as of December 15, 2022 for up to \$750,000,000. Incorporated by reference to Exhibit 10.3 to our Form 10-Q filed January 13, 2023.
10.39	— Series T Future Advance Bond from the Registrant to the Federal Financing Bank dated as of December 15, 2022 for up to \$750,000,000 maturing on July 15, 2057. Incorporated by reference to Exhibit 10.4 to our Form 10-Q filed January 13, 2023.
10.40	— Ninth Amended, Restated and Consolidated Pledge Agreement dated as of December 15, 2022 between the Registrant, the Rural Utilities Services and U.S. Bank National Association. Incorporated by reference to Exhibit 10.5 to our Form 10-Q filed January 13, 2023.
10.41	— Ninth Amended, Restated and Consolidated Bond Guarantee Agreement dated as of December 15, 2022 between the Registrant and the Rural Utilities Services. Incorporated by reference to Exhibit 10.6 to our Form 10-Q filed January 13, 2023.
10.42	— Amended and Restated Master Sale and Servicing Agreement, dated as of August 12, 2011, by and between the Registrant and the Federal Agricultural Mortgage Corporation, as amended by Amendment No. 1 dated as of November 28, 2016. Incorporated by reference to Exhibit 10.7 to our Form 10-Q filed on January 13, 2017.
10.43	— Amended and Restated Master Note Purchase Agreement dated March 24, 2011 between the Registrant and Federal Agricultural Mortgage Corporation. Incorporated by reference to Exhibit 4.4 to our Form 10-Q filed on April 13, 2011.
10.44	— Second Amended and Restated First Supplemental Note Purchase Agreement dated February 26, 2018 for up to \$5,500,000,000 between the Registrant and Federal Agricultural Mortgage Corporation. Incorporated by reference to Exhibit 10.01 to our Form 10-Q filed on April 11, 2018.
10.45	— Third Amended and Restated First Supplemental Note Purchase Agreement dated May 20, 2021 for up to \$5,500,000,000 between the Registrant and Federal Agricultural Mortgage Corporation. Incorporated by reference to Exhibit 10.52 to our Form 10-K filed on July 30, 2021.
10.46	— Fourth Amended and Restated First Supplemental Note Purchase Agreement dated June 15, 2022 for up to \$6,000,000,000 between the Registrant and Federal Agricultural Mortgage Corporation. Incorporated by reference to Exhibit 10.55 to our Form 10-K filed on August 8 2022.
10.47	— Second Amended, Restated and Consolidated Pledge Agreement dated July 31, 2015, between the Registrant, Federal Agricultural Mortgage Corporation and U.S. Bank Trust National Association. Incorporated by reference to Exhibit 10.48 to our Form 10-K filed on August 26, 2015.

[Table of Contents](#)

Exhibit No.	Description
10.48	— Long Term Standby Commitment to Purchase dated August 31, 2015, between the Registrant and Federal Agricultural Mortgage Corporation. Incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on October 14, 2015.
10.49	— Amendment No. 1 to Long Term Standby Commitment to Purchase, dated as of May 31, 2016, between the Registrant and Federal Agricultural Mortgage Corporation. Incorporated by reference to Exhibit 10.38 to our Form 10-K filed on August 25, 2016. Registrant agrees to furnish to the Securities and Exchange Commission a copy of all other instruments defining the rights of holders of its long-term debt upon request.
23.1*	— Consent of KPMG LLP.
31.1*	— Certification of the Chief Executive Officer required by Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	— Certification of the Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act of 2002.
32.1†	— Certification of the Chief Executive Officer required by Section 906 of the Sarbanes-Oxley Act of 2002.
32.2†	— Certification of the Chief Financial Officer required by Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	— Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	— XBRL Taxonomy Extension Schema Document.
101.CAL*	— XBRL Taxonomy Calculation Linkbase Document.
101.LAB*	— XBRL Taxonomy Label Linkbase Document.
101.PRE*	— XBRL Taxonomy Presentation Linkbase Document
101.DEF*	— XBRL Taxonomy Definition Linkbase Document
104.00	— Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

*Indicates a document being filed with this Report.

^Identifies a management contract or compensatory plan or arrangement.

†Indicates a document that is furnished with this Report, which shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that Section.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the County of Loudoun, Commonwealth of Virginia, on the 2nd day of August 2023.

NATIONAL RURAL UTILITIES COOPERATIVE
FINANCE CORPORATION

By: /s/ J. ANDREW DON

J. Andrew Don

Chief Executive Officer

[Table of Contents](#)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ J. ANDREW DON</u> J. Andrew Don	Chief Executive Officer	August 2, 2023
<u>/s/ YU LING WANG</u> Yu Ling Wang	Senior Vice President and Chief Financial Officer	August 2, 2023
<u>/s/ PANKAJ SHAH</u> Pankaj Shah	Vice President and Controller (Principal Accounting Officer)	August 2, 2023
<u>/s/ DAVID E. FELKEL</u> David E. Felkel	President and Director	August 2, 2023
<u>/s/ G. ANTHONY NORTON</u> G. Anthony Norton	Vice President and Director	August 2, 2023
<u>/s/ MARK A. SUGGS</u> Mark A. Suggs	Secretary-Treasurer and Director	August 2, 2023
<u>/s/ CHARLES A. ABEL II</u> Charles A. Abel II	Director	August 2, 2023
<u>/s/ ANTHONY A. ANDERSON</u> Anthony A. Anderson	Director	August 2, 2023
<u>/s/ THOMAS A. BAILEY</u> Thomas A. Bailey	Director	August 2, 2023
<u>/s/ DONNIE BIDEGAIN</u> Donnie Bidegain	Director	August 2, 2023
<u>/s/ JARED ECHTERNACH</u> Jared Echternach	Director	August 2, 2023
<u>/s/ DARICK EISENBRAUN</u> Darick Eisenbraun	Director	August 2, 2023
<u>/s/ TIMOTHY ELDRIDGE</u> Timothy Eldridge	Director	August 2, 2023

[Table of Contents](#)

<u>/s/ BRUCE ANTHONY EVERHART</u> Bruce Anthony Everhart	Director	August 2, 2023
<u>/s/ DENNIS FULK</u> Dennis Fulk	Director	August 2, 2023
<u>/s/ BARBARA E. HAMPTON</u> Barbara E. Hampton	Director	August 2, 2023
<u>/s/ WILLIAM KEITH HAYWARD</u> William Keith Hayward	Director	August 2, 2023
<u>/s/ MICHAEL HEINEN</u> Michael Heinen	Director	August 2, 2023
<u>/s/ BRADLEY P. JANORSCHKE</u> Bradley P. Janorschke	Director	August 2, 2023
<u>/s/ ANTHONY LARSON</u> Anthony Larson	Director	August 2, 2023
<u>/s/ SHANE LARSON</u> Shane Larson	Director	August 2, 2023
<u>/s/ JOSEPH D. MARTIN</u> Joseph D. Martin	Director	August 2, 2023
<u>/s/ BRENT MCRAE</u> Brent McRae	Director	August 2, 2023
<u>/s/ JOHN METCALF</u> John Metcalf	Director	August 2, 2023
<u>/s/ KENDALL MONTGOMERY</u> Kendall Montgomery	Director	August 2, 2023
<u>/s/ JEFFREY ALLEN REHDER</u> Jeffrey Allen Rehder	Director	August 2, 2023

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-263864 and No. 333-249702) on Form S-3 of our report dated August 2, 2023, with respect to the consolidated financial statements of National Rural Utilities Cooperative Finance Corporation.

/s/ KPMG LLP

McLean, Virginia
August 2, 2023

National Rural Utilities Cooperative Finance Corporation
Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

I, J. Andrew Don, certify that:

1. I have reviewed this report on Form 10-K of National Rural Utilities Cooperative Finance Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's board of directors:
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2023

By: /s/ J. ANDREW DON

J. Andrew Don

Chief Executive Officer

A signed original of this written statement required by Section 302 has been provided to National Rural Utilities Cooperative Finance Corporation and will be retained by National Rural Utilities Cooperative Finance Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

National Rural Utilities Cooperative Finance Corporation
Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

I, Yu Ling Wang, certify that:

1. I have reviewed this report on Form 10-K of National Rural Utilities Cooperative Finance Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's board of directors:
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2023

By: /s/ YU LING WANG

Yu Ling Wang

Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 302 has been provided to National Rural Utilities Cooperative Finance Corporation and will be retained by National Rural Utilities Cooperative Finance Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

National Rural Utilities Cooperative Finance Corporation
Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

Pursuant to the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Sections 1350(a) and (b)), I, the Chief Executive Officer of National Rural Utilities Cooperative Finance Corporation (“CFC”), hereby certify to the best of my knowledge as follows:

1. CFC’s Annual Report on Form 10-K for the fiscal year ended May 31, 2023 filed with the Securities and Exchange Commission (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of CFC.

Date: August 2, 2023

By: /s/ J. ANDREW DON

J. Andrew Don

Chief Executive Officer

A signed original of this written statement required by Section 906 has been provided to National Rural Utilities Cooperative Finance Corporation and will be retained by National Rural Utilities Cooperative Finance Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

National Rural Utilities Cooperative Finance Corporation
Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

Pursuant to the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Sections 1350(a) and (b)), I, the Chief Financial Officer of National Rural Utilities Cooperative Finance Corporation (“CFC”), hereby certify to the best of my knowledge as follows:

1. CFC’s Quarterly Report on Form 10-K for the fiscal year ended May 31, 2023 filed with the Securities and Exchange Commission (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of CFC.

Date: August 2, 2023

By: /s/ YU LING WANG

Yu Ling Wang

Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to National Rural Utilities Cooperative Finance Corporation and will be retained by National Rural Utilities Cooperative Finance Corporation and furnished to the Securities and Exchange Commission or its staff upon request.