MOODY'S
INVESTORS SERVICE

CREDIT OPINION
30 November 2018

Update

Rate this Research

RATINGS

National Rural Utilities Coop. Finance Corp.

Domicile	Dulles, Virginia, United States
Long Term Rating	A2
Type	Senior Unsecured - Dom Curr
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Kevin G. Rose 212-553-0389
VP-Senior Analyst
kevin.rose@moodys.com

A.J. Sabatelle 212-553-4136
Associate Managing Director
angelo.sabatelle@moodys.com

Sarah Lee 212-553-6955
Analyst
sarah.lee@moodys.com

National Rural Utilities Coop. Finance Corp.

Credit Update of Key Rating Factors

Summary

National Rural Utilities Cooperative Finance Corporation's (CFC) credit profile benefits substantially from its consistently high quality asset portfolio and unique market position as the dominant lender to electric cooperatives. CFC maintains its excellent competitive position by effectively pricing member loans to cover costs and earn targeted margins, having a strong competitive position among its target market, employing sound risk management and sustaining an above average liquidity profile. The credit profile is also buoyed by the steady, above-average performance of CFC's loan portfolio, which benefits from the strength and resilience of the electric cooperative sector along with substantially reduced loans to the riskier telecommunications sector, and a diversified pool of loan funding sources. CFC's loan portfolio is supported by the above average credit quality of CFC's electric cooperative member base, with most of its borrowers exhibiting strong investment grade credit characteristics. Even as CFC remains committed to restoring an improving trend for its leverage ratio, we expect the cooperative's continuing high leverage to remain its most pressing credit challenge.

Credit Strengths

» Loan and guarantee portfolio dominated by rural electric cooperatives (RECs)

» Loan pricing flexibility enables CFC to meet and often exceed targeted coverage ratios

» Consistently above-average credit quality loan portfolio with no non-performing loans at August 31, 2018

» Unique franchise provides strong competitive position

» Multiple funding sources allow for less reliance on capital markets

Credit Challenges

» Single industry concentration

» High leverage which is challenging to reduce particularly when loan growth is strong

Rating Outlook

The stable rating outlook incorporates our view that any loan growth among RECs will help maintain strong asset quality within the loan portfolio, particularly as the telecom loan portfolio remains a de-minimus portion of the total loan portfolio. The stable outlook also considers CFC's ongoing commitment to gradually reduce leverage, while maintaining a good liquidity profile and expanded access to private sources of funding to offset the firm's reliance

on wholesale funding. CFC's high leverage, single industry concentration and single obligor concentration remain rating constraints.

Factors that Could Lead to an Upgrade

» CFC's relatively high leverage, which has modestly increased in recent periods after several years of improvement, as well as its single industry and single-obligor concentration collectively limit the prospect of a rating upgrade within the next twelve months.

» Prospects for a positive rating action exist beyond the next 12-months if the Moody's adjusted debt to adjusted capital funds metric improves to be well under 7.0x on a sustained basis, liquidity remains strong, and alternatives to wholesale capital market funding increase in number and depth, while CFC continues to maintain a relatively clean portfolio with no new large non-performing assets; this is particularly the case if the CFC loan portfolio can continue to demonstrate an ability to produce stable financial results which exceed the 1.1x adjusted times interest earned ratio (TIER) target on a consistent basis.

Factors that Could Lead to a Downgrade

» A negative rating action could result if one or more new large problem loans surfaced within CFC's portfolio;

» If the cooperative's strategy began to focus on growing its lending to non-core electric cooperative markets;

» If ongoing debt capital raising efforts and capital rotation policies materially increase CFC's leverage;

» If CFC's access to private sources of long-term capital become constrained;

» If CFC fails to maintain an adequate liquidity profile, including ample access to multi-year bank credit facilities.

Key Indicators

Exhibit 1

	2018	2017	2016	2015	2014	2013	2012	2011	2010
Loans ($billions) [1]	25.18	24.37	23.15	21.46	20.47	20.3	18.91	19.33	19.34
Adjusted Capital Funds ($billions) [1][2]	2.91	2.80	2.77	2.70	2.66	2.74	2.55	2.6	2.49
Adjusted TIER (x) [1][3]	1.17	1.16	1.22	1.13	1.21	1.29	1.1	1.21	1.12
Adjusted Debt / Adj. Capital Funds (NIC) x [1][2][4]	7.76	7.53	7.40	7.37	7.19	7.15	7.1	7.13	7.22
Loan Loss Reserve ($millions) [1][5]	19	37	33	34	56	54	143	161	593
Loan Loss Reserve / Loans (%) [1][5]	0.07	0.15	0.14	0.16	0.27	0.27	0.76	0.83	3.07

[1] Fiscal year ends May 31st. [2] Members' Equity is adjusted for derivative forward value and foreign currency adjustments. [3] Net margin adjusted to exclude derivative forward value and foreign currency adjustments. Cost of funds adjusted to include derivative cash settlements. [4] Members capital securities receive equity credit, as determined by Moody's. [5] Excludes loss reserves for guarantee portfolio of $1M, $1M, $1M, $1M, $2M, $2M, $6M, $6M, and $6M for 2018, 2017, 2016. 2015, 2014, 2013, 2012, 2011, and 2010.
Source: Moody's Investors Service, CFC SEC filings

Corporate Profile

Headquartered in Dulles, Virginia, CFC is a member-owned cooperative association, non-bank financial institution exclusively serving rural electric and telecommunication utilities. CFC was organized in April 1969 by RECs to provide an economical alternative to federally subsidized funds from the Rural Utilities Service (RUS) of the U.S. Department of Agriculture.

Loans to telecommunication members are made through Rural Telephone Finance Cooperative (RTFC), a private cooperative association formed to provide financing for its rural telecommunications members and affiliates. Loans are also made through National Cooperative Services Corporation (NCSC), a member-owned cooperative association, which primarily provides specialized financing and services to entities owned, operated and controlled by RECs.

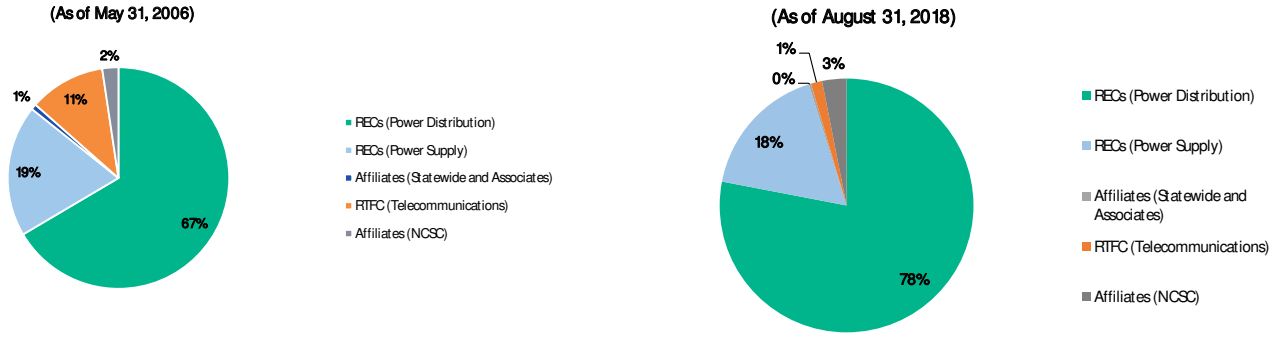
Detailed Credit Considerations

CFC consistently exceeds its 1.10x TIER target

As a member-owned cooperative lender, CFC's goal is to set rates that provide its members with the lowest cost financing while also earning a margin consistent with defined financial targets to support sound credit quality. Members' loans and guarantees are priced to cover CFC's funding costs, general and administrative expenses, the loan loss provision, and a modest margin to maintain an adjusted TIER of at least 1.10x. CFC's adjusted TIER typically exceeds its minimum target and for the three months ended August 31, 2018 was 1.13x compared to 1.16x at August 31, 2017, in both instances comfortably in excess of the target. At fiscal year ended (FYE) May 31, 2018, CFC's adjusted TIER was 1.17x compared to the 1.16x adjusted TIER at FYE 2017 and the average of 1.18x over the past three fiscal years. CFC's net interest income and related margins are likely to benefit on a sustained basis beginning in the calendar year 2019 following the replacement of a sizeable, high coupon collateral trust bond that matured in November 2018 and was replaced with debt at substantially lower rates.

The consolidated loan portfolio is heavily weighted towards low-risk RECs

Exhibit 2
Total Loans Portfolio



Source: Moody's Investors Service, CFC SEC filings

CFC's principal lending market is the REC distribution segment, which we consider to be among the least volatile and most resilient across the electric power sector. The REC distribution segment conducts relatively low risk business activities, tends to have generally steady capital requirements and employ conservative capital structures, and the majority benefit from full flexibility in setting their customers' rates. As of August 31, 2018, of the approximate 99% of CFC's loan portfolio with RECs and entities owned, operated and controlled by RECs, about 78% or $19.6 billion of loans were with rural electric distribution cooperatives, a segment that we consider to have strong investment grade credit qualities. The majority of the remaining loans are to generation and transmission (G&T) cooperatives. Of the G&T cooperatives rated by Moody's, most of whom are CFC's borrowers, the vast majority have investment grade credit qualities.

During FY 2018, CFC experienced $812 million in net new loan demand, primarily comprised of an increase of $726 million from the lowest risk distribution cooperatives, an increase of $173 million from NCSC and an increase of $9 million from RTFC, partially offset by a $107 million decrease in loans to G&T cooperatives. Collectively, the incremental new loan activity during 2018 was a credit positive from a portfolio perspective. The new loans to distribution cooperatives were used to make additional capital investments and to refinance loans from other lenders. The loan volume was also influenced by the addition of 11 more “100% borrowers” in FY 2018, bringing CFC's total number of such borrowers to 235. Based on the latest SEC filings, CFC expects further modest increases to its outstanding loan balances during FY 2019.

CFC is steadfast in its commitment to minimize its lending to the riskier telecommunications sector, a credit positive initiative. The total outstanding telecommunications loans have declined by well over $4.0 billion since FY 2003 with about $358.6 million outstanding at August 31, 2018, representing just 1% of CFC's total outstanding loan portfolio.

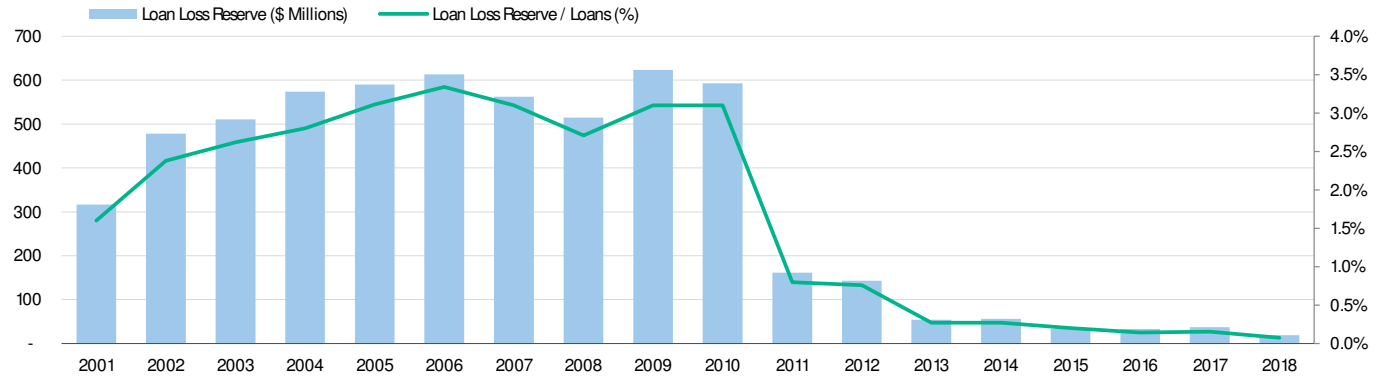
CFC can reset margins through flexible loan pricing

CFC's credit quality benefits from its ability to reset margins sufficiently to maintain its targeted adjusted TIER of 1.10x. CFC manages this policy by having terms and conditions in nearly all of its customers' loan documents that allow for a variety of re-pricing mechanisms. CFC again exhibited a high loan retention rate in FY 2018 when it retained 99% of about $904 million of loans that repriced during that fiscal year. The loan retention rate for fiscal years 2016-18 averaged 98%. Over the next eight quarters, approximately $1.278 billion of CFC's fixed rate loan portfolio will re-price based upon the terms and conditions set forth in the specific loan documents. CFC's leading position in the marketplace coupled with the flexibility of its electric cooperative borrowers to set rates as necessary to cover their expenses and maintain required covenants helps to effectively carry out this strategy.

High quality loan portfolio evident through declining trend in loan loss reserves

Exhibit 3

Loan Loss Reserve 2001-2018



Source: Moody's Investors Service, CFC SEC Filings

Even with the substantial loan loss recorded following the 2016 sale of CFC's telecommunications and cable television operations held by subsidiary formerly held by Caribbean Asset Holdings (CAH) and related loans to Innovative Communications Corp. (ICC), CFC has a strong loan loss history. The sale of CAH was completed in a manner that maximized loan-loss recoveries and satisfied a key objective for CFC since ICC defaulted on its loan in 2004. The transaction also marked the end of an expensive and litigious debt restructuring, allowing CFC to exit its foray into riskier telecom cooperative lending with its balance sheet and liquidity intact. Since the cooperative's inception in 1969, there have been 31 defaults and about $513 million of cumulative net charge-offs on its loan portfolio. Sixteen defaults occurred in the electric portfolio and fifteen related to the telecom portfolio. Despite the relatively even number of defaults between the telecom and electric portfolios, more than 80% of the cumulative net charge-offs were related to the riskier telecom loans. The overall low loan write-off history demonstrates the historically high credit quality of CFC's portfolio, the strength of the collateral typically pledged to CFC, the essentiality of the electric distribution business, and the ability of CFC to take a long-term view concerning debt restructurings due to its unique relationship with its customer base and the fact that CFC does not have profit-driven goals.

At August 31, 2018 (the end of first quarter for FY 2019) and at FYE 2018, CFC reported $12.228 million and $12.599 million of troubled debt restructuring (TDR) loans, respectively, in both instances comprising just 0.05% of its total loans outstanding. All of CFC's TDR loans for the same two periods were performing according to the terms of their respective restructured loan agreement and on accrual status as of the respective reported dates.

At August 31, 2018, CFC's allowance for loan losses was about $18.7 million, relatively unchanged from about $18.8 million FYE 2018, but representing about a 50% decline from the $37.1 million reported at August 31, 2017. The amounts for FYE 2018 and August 31,

2018 represent about 0.07% of CFC's total loans outstanding as of both ending period dates. The decrease from August 31, 2017 is primarily attributable to a decline in the specific reserve for loans individually evaluated for impairment. For the past five fiscal years 2014-2018, CFC's allowance for loan losses as a percentage of its total loans outstanding has declined from 0.27% to 0.07%.

Exhibit 4

Loan Security as of August 31, 2018

Loan Security ($ Amounts in Billions)	Secured	Secured as % of Segment	Unsecured	Unsecured as % of Segment
CFC	22.36	93%	1.67	7%
NCSC	0.70	90%	0.08	10%
RTFC	0.34	96%	0.02	4%
Total Loans	23.41	93%	1.76	7%

Source: Moody's Investors Service, CFC SEC Filings

At August 31, 2018, about 93% of CFC's total loan portfolio was secured. Loans are typically secured on parity with other secured lenders (primarily RUS), if any, by a mortgage lien on the borrower's total assets and a pledge of future revenues with certain exceptions typical for utility mortgages. This strong security position has helped to provide high recovery values for CFC in past problem loan restructurings and often enables CFC to receive the payment of interest and principal while a borrower is operating in bankruptcy. The majority of CFC's unsecured loans reflect primarily short-term lines of credit with RECs.

An additional feature in CFC's portfolio is the fact that the vast majority of CFC loans amortize principal payments over time. To that end, approximately $1.3 billion of principal is expected to amortize over the next 12 months. In addition to providing CFC with a predictable source of annual cash flow, the loan amortization feature supports the overall credit quality of the CFC loan portfolio as it reduces individual cooperative's annual refinancing risk while gradually reducing leverage across the electric cooperative system.

Unique franchise provides strong competitive position

CFC enjoys strong support from its member cooperatives as it provides them with attractive and customized financing alternatives. The value of the CFC franchise is evident through the broad participation by the RECs in CFC's offering of member capital securities as well as the steadily increasing members' investment amount that helps to fund CFC's operations. CFC's unique franchise position is magnified by the financial institution's status as a tax-exempt cooperative association with a primary operating objective to provide low cost funding to its members. As such, operating margin and earnings profitability metrics, which are important factors in assessing the credit quality of for-profit financial institutions, have limited value when assessing CFC's credit risk profile.

Steady improvement in risk management and single obligor risk

CFC has strong risk management capabilities and maintains a balance between the credit needs of its members and the requirement to insure sound credit quality of the loan and guarantee portfolio. The cooperative regularly maintains an internal risk rating system and sets exposure limits for each borrower, while also retaining an independent bank consulting firm to provide an annual third party assessment of the functioning of the risk rating system.

Additionally, CFC has increased its ability to syndicate new and existing loan transactions and has developed expertise in selling portfolios of loans to targeted investors. With respect to loan sales, at August 31, 2018, CFC had sold 887 individual loans ($1.599 billion in aggregate) to Farmer Mac and was servicing loans aggregating approximately $966.2 million.

Furthermore, as part of CFC's strategy to manage its credit risk exposure, the cooperative executed a long-term standby purchase commitment agreement with Farmer Mac effective August 31, 2015, as amended on May 31, 2016. This agreement allows CFC to designate certain loans to be covered under the commitment, subject to approval by Farmer Mac, and if any such designated loan subsequently goes into material default for at least 90 days, upon request by CFC, Farmer Mac must purchase such loan at par value. CFC designated, and Farmer Mac approved loans that had an aggregate outstanding principal balance of $651 million as of August 31, 2018 compared with $660 million at May 31, 2018. No loans had been put to Farmer Mac for purchase, pursuant to this agreement, as of August 31, 2018.

While single obligor risk is a chronic characteristic of this issuer, exposure to the riskier telecommunications sector has declined considerably since 2004. For example, during the past eight fiscal years, none of the top ten single obligors were telecommunications borrowers and of the top twenty borrowers for the past six fiscal years, none were telecom firms. In stark contrast, historical calculations at FYE 2004 placed five of the top ten and six of the top 20 CFC loan exposures with telecommunications borrowers.

Prevailing single industry concentration

At August 31, 2018, about 99% of CFC's loans and guarantees were made to RECs and their affiliates. As such, trends in the rural electric utility's aggregate credit quality will directly impact CFC. Over the next several years, RECs will face additional challenges, all of which have the potential to increase the cost of providing electric service to rural areas. Since many of the larger generation cooperatives still rely on coal as a primary fuel source for generation, substantial incremental increases in capital requirements to address any elevated carbon transition risk represents a credit negative overhang. That said, rate autonomy available to power supply cooperatives provides flexibility for any incremental cost to be passed along to the distribution cooperatives and ultimately to the end-use customer. The RECs' ability to seamlessly pass along higher operating and capital costs to their customer base is an important factor in maintaining credit quality across the RECs and at CFC.

Maintaining funding flexibility by preserving and increasing access to diverse sources of funding

As with many finance companies, CFC is dependent upon access to the long-term and short-term capital markets for refunding debt maturities and financing its business. In addition to annual operating cash flow, member loan repayments approximate $1.3 billion for the next twelve months and are expected to be near that level each year for the next three years.

At August 31, 2018, CFC's members provided about $4,630 million of funding, which represented about 19% of total debt outstanding. Of the $4,630 million, about $2,621 million represented short-term debt funding through $1,286 million in members' commercial paper, $535 million in members' investments in the daily liquidity fund and $799 million in the members' select notes program. The balance of members' funding at August 31, 2018 was provided by $632 million of members' MTNs and $1,378 million of members' subordinated certificates. We consider the members' investments to be a "sticky" form of core funding. CFC uses the dealer commercial paper market to supplement any short-term funding requirements.

Since FY 2006, CFC has been supplementing its longer-term wholesale funding sources through two separate and successful private programs. Under the Guaranteed Underwriter Program (GUP), CFC has been able to secure almost $6.548 billion of twenty year funding from the Federal Financing Bank (FFB) of the US Treasury, of which about $4.841 billion was outstanding at August 31, 2018. Access to the GUP provides CFC with a reliable, low-cost source of long-dated financing as current GUP debt maturities occur in 2025 through 2038. As of August 31, 2018, CFC had up to $1.225 billion available under the GUP.

In addition, starting in FY 2007, CFC established a relationship with Farmer Mac, where Farmer Mac now provides about $5.2 billion in potential funding to CFC through a note purchase facility that expires January 11, 2022 but can be automatically extended for an additional year on the anniversary date of the closing. At August 31, 2018, CFC had availability of up to about $2.4 billion of this facility. Also, since July 31, 2015, CFC had access to a second committed $300 million revolving note purchase agreement with Farmer Mac under which it can borrow up to the committed amount at any time through December 20, 2023. As of August 31, 2018, the full $300 million was available.

Notwithstanding CFC's relationship with its members, Farmer Mac, and its access to FFB funding under the GUP, CFC still remains dependent upon wholesale short-term and long-term funding. CFC's primary sources of long-term capital market funding include secured collateral trust bonds (CTBs), unsecured medium term notes (MTNs), and subordinated deferrable debt.

For more information on capital market access, see liquidity section below.

Creeping leverage trend is expected to reverse course beginning in 2019 as management remains committed to reducing leverage

Due to the nature of its ownership structure, CFC does not have common stock in its capital structure. In its place, we view the deeply subordinated capital term certificates as having equity like characteristics.

CFC's leverage ratio as represented by adjusted debt to adjusted capital funds (according to Moody's calculations) averaged 7.45x during fiscal years 2014-2018.

Although CFC largely funds incremental loan volume with debt, it remains committed to reducing leverage over time. That said, after largely holding leverage in check during fiscal years 2011-2014, CFC's leverage ratio according to Moody's calculations has been gradually increasing for the past four fiscal years and stood at 7.83x at the end of the first quarter of FY 2019 (August 31, 2018). The common thread in CFC's incremental leverage has been the need to fund its loan growth and the effects of the retirement of patronage capital. Other factors affecting leverage during the past four fiscal years included an impairment taken from the CAH asset disposition and declines in members' subordinated certificates outstanding during FY 2015, partially offset by the benefits of partial equity treatment afforded to additional subordinated deferrable interest debentures issued during FY 2016 and an increase in total members' equity since FY 2015.

Despite CFC's creeping leverage trend over the past four fiscal years, the latest leverage ratio remains comparable to the 7.83x level exhibited nine years ago at FYE 2009. Among the contributing factors during this nine year period were: members investing in member capital securities, the increase in excess margin set aside to permanent member capital reserve, the change in CFC's equity retention plan, the additional equity it transferred after revising its loan loss allowance, and the benefits of partial equity treatment afforded to additional subordinated deferrable interest debentures issued.

Although the need to fund moderate loan growth is likely to continue during FY 2019, CFC's leverage trend should reverse course beginning in 2019 owing to the good prospects for improvement in the cooperative's adjusted net interest income following the repayment of $880 million of its highest coupon debt which matured on November 1, 2018.

Liquidity Analysis

CFC has very good liquidity to support its commercial paper program and its variable rate tax-exempt demand bonds. While CFC has alternative funding sources from its members and from private sources, it still remains dependent on the capital markets as a funding source. In addition to annual operating cash flow, member loan amortization payments are expected to approximate $1.3 billion for the next twelve months and are expected to be near that level annually for the next few years.

CFC is an active market participant and FY 2018 funding was sourced across almost all components of its capital structure. During various transactions in FY 2018, CFC raised $800 million of MTNs and $700 million of CTBs. CFC also advanced a total of $250 million under the GUP and closed a previously approved $750 million additional commitment under the GUP, while also redeeming a $325 million GUP loan with an original maturity of April 15, 2026. Finally, during FY 2018 CFC issued a $325 million 30-year note and a $100 million short-term note under the Farmer Mac note purchase agreements. The $100 million short-term note was paid in June 2018.

During the year to date in FY 2019, CFC redeemed early $300 million of its 10.375% CTBs with an original maturity of November 1, 2018 and redeemed the balance of that issue in part through the use of proceeds from issuing two tranches of CTBs aggregating $625 million, which closed on October 31, 2018. CFC also issued $300 million of 3-year floating-rate MTNs, repriced $125 million under the GUP, closed on an additional commitment of up to $750 million of funding under the GUP, advanced $250 million under the program with Farmer Mac and advanced another $100 million under the GUP. CFC continues to have access to substantial private sources of capital, including $1,875 million under the GUP and $2.7 billion under the Farmer Mac facilities, which contributes to the above average liquidity profile.

At August 31, 2018, CFC had a dealer commercial paper balance of approximately $929 million, and no bank bid notes outstanding. CFC has maintained a cushion for the past several years compared to its stated intent to manage its short-term wholesale funding risk by maintaining dealer commercial paper and bank bid notes within an approximate range between $1,000 million and $1,250 million for the foreseeable future. While CFC intends to continue utilizing commercial paper as a source of funding, it is committed to keeping future peak outstanding dealer commercial paper and bank bid notes outstanding in line with or better than the cooperative's aforementioned intended range.

CFC manages its various committed bank facilities which we consider to be its principal form of external liquidity support and these arrangements supplement $265.9 million of cash and cash equivalents and $554 million of liquid, short- to intermediate-term held-to-maturity investment grade debt securities as of August 31, 2018. Through an amendment and extension process closed on November 28, 2018, CFC has two committed credit facilities aggregating $2,975 million. Specifically, CFC has a $1,440 million facility with a November 2021 expiration date and a $1,535 million facility with a November 2023 expiration date. This process results in an overall

relatively modest reduction in available liquidity of about $110 million. With these facilities in place, the total amount of commercial paper that can be issued by CFC is capped at $2,975 million. These credit facilities do not contain a MAC clause but have financial covenants which are set at levels that provide substantial cushion. The agreements require an adjusted TIER average of 1.025x for the last six quarters, a minimum adjusted TIER for the most recent fiscal year of 1.05x, and a maximum senior debt to equity ratio to not be more than 10.0x, in all cases as defined in the agreements. At August 31, 2018, CFC was comfortably in compliance with these covenants.

At August 31, 2018, CFC was the guarantor and liquidity provider for $316.4 million of tax-exempt bonds issued for its member cooperatives. During FYE May 31, 2018 and the first quarter of fiscal year 2019, which ended August 31, 2018, no tax-exempt bonds were put to CFC to purchase pursuant to its obligation as liquidity provider.

Prospectively, for the one year period from October 2018 through September 2019, CFC reported about $2.617 billion of notes and bonds maturing, of which approximately $1,530 million are comprised of CTBs, $478 million are comprised of Member MTNs, $77 million is due under the GUP, and $135 million is due under the Farmer Mac program, leaving approximately $31 million of InterNotes, and $365 million of maturing Dealer MTNs. The larger components of the reported debt maturities for this period are $880 million of CTBs which as noted earlier were redeemed in November 2018, another $650 million of CTBs due in February 2019, and $350 million of Dealer MTNs due in April 2019. The $880 million of CTBs redeemed in November 2018, the $650 million of CTBs due in February 2019 and the $350 million of Dealer MTNs due in April 2019, although collectively sizable, are well within CFC's ability to manage given its large investor following and demonstrated ability to access the market. The balance of the near term maturities throughout the period are of a much more manageable size.

Rating Methodology

The methodology used in these ratings was Finance Companies published in December 2016. Please see the Credit Policy page on www.moodys.com for a copy of the methodology.

Ratings

Exhibit 5

Category	Moody's Rating
NATIONAL RURAL UTILITIES COOP. FINANCE CORP.	
Outlook	Stable
Senior Secured	A1
Senior Unsecured	A2
Subordinate	A3
Commercial Paper	P-1

Source: Moody's Investors Service

REPORT NUMBER 1149774

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

MOODY'S
INVESTORS SERVICE