Fitch Ratings

Fitch Affirms Gainesville Regional Utilities, FL's Revs at 'A+' and CP at 'F1+'; Outlook Stable

Fitch Ratings - New York - 11 March 2020:

Fitch Ratings has affirmed the 'A+' Issuer Default Rating (IDR) of Gainesville Regional Utilities (GRU) and the 'A+' rating on the following bonds issued by the city of Gainesville, FL on behalf of GRU:

--Approximately $1.7 billion in outstanding utility system revenue bonds.

Fitch has also affirmed the 'F1+' rating on GRU's series C tax-exempt commercial paper program ($0 notes currently outstanding).

The Rating Outlook is Stable.

ANALYTICAL CONCLUSION

The 'A+' rating and IDR on GRU reflect the combined utility system's very strong revenue defensibility, as measured by its independent rate raising ability and stable demographic trends, as well as its strong operating risk profile, which includes a low operating cost burden through ownership of a diverse, mainly-utility owned resource base. The customer base is diverse and growing, and rates are generally affordable.

GRU's leverage profile is high for the rating, but Fitch expects a trend of improvement based on management's financial forecast. The forecast includes approved and anticipated rate increases and lower operating expenses beginning in fiscal 2020. The rating and Stable Outlook are tied to expectations of lower future leverage, which will hinge on GRU's ability to carry out its financial plan. GRU anticipates using the expected excess cash flow to lower its leverage by voluntarily retiring some of its outstanding debt over the next several years and cash-funding a portion of its capital program. Fitch's forward looking FAST scenario, which is based on GRU's financial forecast, demonstrates a decreasing leverage profile to levels Fitch believes to be supportive of the rating.

The 'F1+' rating on the Series C CP note program is mapped to the long-term rating and broadly reflects GRU's very strong revenue defensibility and neutral liquidity profile assessment. In addition, the rating takes into account the sizable liquidity sources, including $112 million in available cash and a $125 million revolving credit facility provided by Bank of America, N.A. (IDR's rated 'A'/'F1' by Fitch), which provide sufficient resources to cover the minimum liquidity ratio threshold of 1.25x.

CREDIT PROFILE

GRU provides retail electric, gas, water, wastewater and telecommunications services to approximately 280,000 total customers across the five utility systems. The combined system serves the city and a large proportion of the surrounding areas. The electric system is the largest, accounting for over two-thirds of total system revenues.

The water (9% of total revenues), wastewater (10%) and gas systems serve territories similar to (and overlapping) the electric system, while the telecom utility, known as GRUCom, serves only a few thousand customers and comprises just 3% of total revenues. Each of the systems is self-supporting and stable, exhibiting no customer concentration. Rates, which have declined over the past two years, remain above average for the electric system but are more competitive for the other utilities.

KEY RATING DRIVERS

Revenue Defensibility:: 'aa'

Very Strong Revenue Defensibility

GRU's revenue defensibility assessment reflects the system's very strong revenue framework through the provision of monopolistic services to a growing service area, an independent ability to adjust rates and a strong local economy. Customer growth trends are solid and the unemployment rates for the service territory remains below the national average. The service territory extends into the county with roughly 40% of the customer base is outside the city of Gainesville's city limits.

Residential electric rates declined in 2018 but remain slightly above the state average (EIA data not available yet for 2019). However, rates are highly affordable especially when compared to the broader service territory's somewhat higher median household income (MHI).

Operating Risk:: 'a'

Low Cost Burden, Diverse Resources

The operating cost burden declined in fiscal 2018 following GRU's purchase of the 102 MW Deerhaven Renewable (DHR) biomass generating station. A combination of direct operating control of DHR and lower natural gas prices led to a significant decline in operating expenses, and a cost burden that fully supports the strong assessment. Expected capital needs are manageable and will be funded with a combination of unexpended bond proceeds, excess cash flows and some additional borrowings.

Financial Profile:: 'a'

High Leverage Expected to Decline

GRU's financial profile is strong despite currently high leverage for the rating category. Fitch's view is that a combined utility with monopolistic water and sewer (and natural gas distribution) operations can maintain slightly higher financial leverage relative to electric-only service-providers. In addition, Fitch expects GRU's leverage to decline to below 10x in the near-term based on GRU's financial forecast.

Asymmetric Additional Risk Considerations

There are no additional asymmetric risks affecting the rating.

RATING SENSITIVITIES

Developments that May, Individually or Collectively, Lead to Negative Rating Action:

- Failure to measurably reduce leverage below 10.x in the near term;

- For the short-term rating, if GRU's long-term credit quality falls to 'A' or below, or if there is significant weakening in currently robust internal liquidity support for the commercial paper program, the 'F1+' rating would be downgraded.

Developments that May, Individually or Collectively, Lead to Positive Rating Action:

- Further deleveraging beyond what is currently anticipated that leads to a leverage ratio consistently below 8.0x;

- Sustained decline in the operating cost burden to below 10 cents / kWh could lead to an improved operating risk profile, which in Fitch's view allows for a greater threshold for financial leverage.

SECURITY

The bonds are secured by a first lien on the net revenues of Gainesville Regional Utilities, which is the combined electric, gas, water, wastewater and telecom systems (collectively, the system) supporting the city of Gainesville, FL and surrounding areas. The series C note program is secured by a pledge of system net revenues, subordinate to the prior payment of GRU's long-term debt. There are currently no series C notes outstanding.

Revenue Defensibility

Revenue Source Characteristics

GRU has very strong revenue source characteristics. The system provides monopolistic utility services to a diverse and growing retail customer base, providing resilient and secure revenue sources for the system. While GRU continues to provide telecommunications services that are subject to competition, the service is provided to a small segment of its customer base totaling just 6,700 and comprises less than 3% of total combined system revenues.

GRU also provides a small amount of contracted wholesale sales to the city of Alachua that is set to expire in a couple of years. Spot market sales are de minimus and do not pose a risk of volatility to overall revenue defensibility. Fitch expects non-contracted market sales and revenues from its GRUCom business line to remain limited in GRU's operating profile going forward.

Service Area Characteristics

With an estimated 40% of GRU's customer base residing outside of the Gainesville, and stable overall customer growth, Fitch assesses the overall service area characteristics as strong. The electric system covers approximately 125 square miles and serves roughly 75% of the county's total population. The customer base is predominantly residential (comprising 89% of the total electric system customers) with 46% of total electric sales and 45% of revenues derived from this class.

The strong assessment is supported by GRU's growing customer base, averaging around 1% annually over the past five years and the strong local economy anchored by the University of Florida (UF). In addition, the local unemployment rate is below average. UF's enrollment of 57,000 comprises over 40% of the city's population base, a noteworthy factor in the city's low median household income (MHI) in Fitch's view. Given the uniqueness of Gainesville's proportionally high student population, coupled with a sizable percentage of customers living outside of the city, Fitch considers the county's stronger MHI (at 82% of the US average) when assessing the service area's income levels as support for the strong assessment.

The university remains the largest employer in the county, with more than 27,500 employees. Separately, employment is well diversified among the healthcare, higher education, and light industrial and commercial sectors and Alachua County's unemployment rate of 2.5% in December

2019 is almost a full point below the national rate. Other county economic indicators, such as population growth and gross domestic production growth, also compare favorably with state and national averages.

Rate Flexibility

The electric utility has very strong rate flexibility that is reinforced by its unconstrained legal ability to set rates, and strong overall rate affordability. GRU's rate-setting authority is subject only to city commission approval. Retail electric rates were lowered in fiscal 2018, but remain slightly above average. The elevated rates can be attributed to GRU's pursuit of renewable resources and the utilities' above-average GF transfer payment, which compensates for the high proportion of property tax-exempt customers. Rates charged by GRU for its other utility services are slightly more competitive.

The 2018 residential electric rate, as reported by the U.S. Energy Information Authority (EIA), was 12.77 cents per kWh, which at 111% reasonably approximates the state average. Revenues from residential customers comprised a solid 45% of GRU's total electric revenues in 2018, making GRU's residential rate particularly relevant in our analysis. EIA data for 2019 is not yet available.

Rate flexibility is further supported by electric service that is affordable for a large proportion of GRU's customers. In assessing overall affordability, Fitch takes into consideration the large student population within the city, which leads to somewhat lower income levels, as well as a relatively high proportion of the customer base residing in Alachua County, which demonstrates MHI levels that are roughly one-third higher than the city's. For customers living in the city of Gainesville, the affordability ratio (which measures the annual electric bill for the system to MHI) is only midrange at 3.4%. However, for the roughly 40% of the customer base living outside of the city, the affordability ratio is stronger at closer to 2.5%.

Rate Structure

GRU expects to continue its strategy of modest but consistent increases across the systems. Rates are designed to allow each system to operate independently, without subsidization. Electric rates include a fuel and purchased power adjustment component that facilitates the recovery of more volatile operating costs. Adjustments are typically made monthly and may be implemented at management's discretion without commission approval, ensuring timely recovery. Rate structures for GRU's other utility services include similar provisions for enhanced and timely cost recovery. A roughly 6% electric rate increase was approved by the commission for fiscal 2020. Additional electric rate increases are projected by management to be in the 2%-4% range over the next few years.

Operating Risk

Operating Cost Burden

The system's strong operating risk assessment reflects a low electric operating cost burden, especially over the past two years, driven by a diverse resource base and full operating control of DHR since acquiring the plant in 2018. Operating costs, measured by Fitch as total operating expenses including transfers out, divided by total energy sales, declined from an average of just over 16 cents/kWh in 2015-2017 to 12.99 cents in 2018 and 12.84 cents in 2019.

Since gaining full control of the operations of DHR in 2018, GRU is able to operate the plant as a baseload facility with lower unit costs and more competitive pricing than under the previous purchased power arrangement. In addition, with direct ownership, management has more control over scheduled outages and can cycle down the plant to lower levels than previously allowed to under the PPA when economically appropriate. In 2019, the biomass facility comprised 31% of GRU's total energy dispatched, much of which came at the expense of GRU's costlier coal units. In comparison, the biomass plant comprised just 12% of total energy dispatched in 2017, the year prior to GRU's direct ownership.

General Fund Transfer

GRU makes annual transfer payments to the city of Gainesville. Fitch includes the transfer payment, which has equaled an agreed upon fixed amount for the past several years, in its analysis of the system's operating cost burden given the city's historical reliance on this payment. The previously agreed upon transfer ($38 million) as well as the formula for deriving it expired in 2019. Discussions are ongoing with the city commission to freeze the transfer at the 2019 level for at least the next few years, and may result in a new formulaic approach to the transfer on a longer-term basis, both of which would be viewed positively by Fitch.

Operating Cost Flexibility

Fitch assigns a neutral operating cost flexibility assessment reflecting GRU's well-diversified portfolio of power supply resources led by its ownership of seven distinct natural gas units, totaling 264 MW of capacity, followed by a 228 MW coal plant, Deerhaven Generating Station unit 2), and the recently purchased 103 MW Deerhaven Renewable biomass plant. In total, GRU has over 630 MW's of total capacity, which is well in excess of peak demand (429 MW).

GRU's overall resource mix is diversified by number of units and by fuel type. Some of GRU's steam and combustion turbine units are of older vintage and are expected to be considered for retirement over the next several years. In particular, Deerhaven Unit 1 (with a capacity of 75 MW) began commercial operation in 1982 and is mainly used for reserve capacity. GRU is considering retiring this unit in 2022 and replacing it with a purchased power agreement and expand transmission access, among other potential options.

Environmental Considerations

While there are no renewable portfolio standards in the state of Florida, GRU's purchase of the Deerhaven Renewable biomass plant in 2018 (and through purchase of the energy from the plant through a PPA prior to ownership) demonstrates its desire to become less fossil-fuel dependent for over a decade. With the acquisition of the biomass plant, GRU is able to dispatch at its discretion, which has led to much higher rates of use and lower use of coal and natural gas. In 2019, biomass accounted for over 30% of total energy dispatched, providing a dual benefit of lower total operating costs and carbon dioxide emissions. The plant utilizes waste wood from around the region, which is processed into small chips and hauled to the facility.

The city commission recently established a goal of reaching 100% renewable energy by 2045, codifying the initial goals to significantly increase renewable generation over the next two decades. GRU is very early in the process of determining a long-term strategy to achieving these goals. Specific information is not expected to available for some time. However, Fitch will continue to analyze GRU's resource portfolio in the context of its operating profile and long-term leverage.

Capital Planning and Management

GRU's ongoing capex has resulted in a very strong average age of plant of 11 years. Capex to depreciation has averaged just over 200% over the last five years, but this average reflects spending related to the purchase of the biomass plant.

GRU's future capital program is expected to average approximately $70 million per year through 2024, which is around the level of capex historically, excluding the biomass plant purchase. The electric portion of the capital improvement program (CIP) comprises the largest proportion of total spending. Funding sources are expected to come from a combination of existing bond proceeds, internally generated funds, including a rise in rates and a small potential future debt issuance.

Fuel Diversity/Hedges

GRU's fuel-procurement and management strategy includes diversification of fuel mix and sources, physical and financial hedging activities, and short-term contract procurement, among others. Dispatched energy by fuel source was diverse in fiscal 2019, led by natural gas at 44%, followed by biomass/waste wood at 31% and coal at 20%. The remaining was addressed through spot purchase power and a small amount of landfill gas and solar.

Coal inventory is maintained at a minimum of approximately 40- to 50-day supply based on anticipated burn rates, market price variability and potential disruptions in delivery. Roughly 75% of coal supply is maintained under one- to three-year contracts, with the remainder supplied through contracts of one year or less. The System currently does not have active contract(s) for the supply of coal and will not be making any purchases in the near future due to high inventory resulting from low burn volumes from fuel switching.

Natural gas supply is transported by long-term contracts for both the electric and natural gas systems by Florida Gas Transmission Company, LLC. Supplies are transported from the Gulf Coast region under firm (daily) contracts priced under tariffs filed with the Federal Energy Regulatory Commission. TEA provides energy trading and strategies to GRU and is responsible for daily procurement and hedging transactions.

Telecom System

GRU provides telecommunication services, internet access services communication tower antenna space leasing and public safety radio services. GRUCom has provided telecommunication services since 1995. Services provided include high-speed internet access, data transport to other local businesses (high-bandwidth circuits), tower leasing for wireless telephone providers and public safety radio services for local government. The fiber-optic network is an important draw for new customers deciding to locate in Gainesville, but remains a small component of operating revenues.

Water and Wastewater System

GRU provides water service to 73,078 customers located within the city limits and the immediate surrounding unincorporated areas of the county. UF and a small residential development in Alachua County are the only wholesale customers of the water system.

Raw water for customer use is obtained from 16 wells in the Floridan Aquifer. Groundwater is treated before distribution at GRU's Murphree Water Treatment Plant. The plant's peak day rated treatment capacity is 54 million gallons per day (MGD), expandable up to 60MGD. GRU's current well supply is expected to yield a minimum of 60MGD, consistent with the capacity of the Murphree plant, and well in excess of actual peak day demand.

The wastewater system serves approximately 66,638 primarily residential customers throughout essentially the same area served by the water system, and also serves roughly 1,000 reclaimed water customers. GRU owns and operates two wastewater treatment plants with a combined average daily capacity of 22.4MGD, which remains comfortably above average daily flows. Wastewater is treated to tertiary standards and effluent is disposed of by discharge and deep well injection. The system is aggressively expanding its water reuse system to conserve groundwater resources and preserve effluent disposal capacity.

Financial Profile

GRU's coverage and liquidity metrics remained stable in recent years as changes in rates were balanced against operating cost reductions and stabilized general fund transfers. Fitch-calculated coverage of full obligations (COFO) in fiscal 2019 was 1.7x, which is slightly improved from results over the previous two years. Liquidity remains neutral to the financial profile assessment with 176 days cash on hand at the end of fiscal 2019. As of the end of fiscal 2019, GRU had a total of $112 million in unrestricted cash on hand, including amounts available in the rate stabilization and utility plant improvement funds.

The leverage ratio, calculated as net adjusted debt to adjusted FADS, is high at just over 11.0x over the past two years but expected to trend lower beginning in fiscal 2020 and continue through the following four years based on GRU-provided pro forma financials. Fitch anticipates an increase in net revenues available for debt service from an approved base rate increase in 2020 (and smaller increases going forward), which is expected to allow GRU to begin retiring some debt earlier than scheduled. In total, GRU anticipates lowering outstanding debt by using a portion of its excess cash flows to fund the early redemption of over $60 million of debt over the next five years.

Fitch Analytical Stress Test (FAST) - Base and Rating Case Analysis

Fitch's base case is informed by GRU's financial pro forma for fiscals 2020-2024, which incorporates modest overall growth in demand, additional rate adjustments still to be approved by the commission, amortization of $200 million of outstanding bonds (through a combination of scheduled maturities and early debt retirement), a capital spending plan that incorporates some additional debt, and level annual general fund transfers. With these assumptions, which Fitch believes to be reasonable, the base case indicates slightly greater funds available for debt service and lower overall debt, which leads to a steady decline in leverage to below 10x by fiscal 2021 and closer to 9.0x by years four (2023) and five (2024) of the forward-look.

In the rating case, the FAST incorporates a stress in electric sales in the first two years (4.7% decline in the first year followed by a 1.2% decline in year two) before a return to sales growth in years three through five. The previously mentioned base case assumptions are also applied along with a very modest 1% decline in other operating expenses in year two followed by a modest 0.5% increase in rates in year three. The rating case also results in a decline in the leverage ratio from 2019 levels to 9.4x in year four and 9.2x in year five. Overall through the rating case, the leverage ratio follows a similar trend as the base case with leverage below the 10.0x level by fiscal 2022.

Fitch anticipates a decline in leverage over the next five years based on GRU-provided financial projections, which include expectations for meaningful pay-go capital spending, manageable additional rate increases and scheduled debt amortization. Fitch believes GRU, as a combined system with significant water and sewer operations, can maintain a slightly larger amount of financial leverage relative to its solely electric-service-providing peers.

Debt Management

GRU's debt strategy includes a capital structure utilizing a combination of fixed- and variable-rate debt, as well as long- and short-term financings to match assets and liabilities and achieve the lowest possible interest rate costs. GRU is authorized to issue both senior and subordinate lien debt under existing resolutions. GRU had $1.7 billion of total debt outstanding at fiscal-end 2019 consisting of approximately $1.35 billion of long-term bonds and $330 million of direct placements.

Over 90% of GRU debt is currently fixed or synthetically fixed rate, which is slightly higher than historical levels. GRU continues to actively and prudently manage its hedging instruments, including interest rate swaps, caps and collars, to manage interest rate risk. GRU has four swap agreements currently outstanding with several different highly rated counterparties.

The mark-to-market valuation on the swaps totaled a negative $81 million as of fiscal year end 2019. Swap termination triggers include minimum rating thresholds, although GRU has sufficient liquidity and access to short-term capital to make a termination payment in the unlikely event swap termination is triggered. If owed, Swap termination payments would be paid subordinate to the bonds. Fitch believes the challenges of monitoring a sizable variable rate debt portfolio, including swap, liquidity and counterparty exposures remains a risk, but overall has been well managed to date by GRU.

Ample Liquid Resources for CP Program

In addition to the outstanding bonds, GRU has authority to issue up to $150 million in commercial paper notes (series C and series D), which would be subject to a subordinate lien. The series C notes ($125 million authorized) are backed by a credit agreement with Bank of America, N.A. through November 2021, while the series D notes have liquidity support from State Street Bank and Trust through August 2020.

The 'F1+' rating on the series C note program is supported by the long-term credit quality of the system and the adequacy of GRU's available liquid resources. Fitch's rating incorporates all potential draws on system liquidity, including the smaller taxable series D notes ($25 million authorized, $0 outstanding).

Total available cash as of Sept. 30, 2019 combined with the revolving credit facility, provided 1.58x coverage of the maximum borrowable amount of CP, which is more than adequate given Fitch's neutral assessments for GRU's liquidity profile and debt structure.

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

ESG Considerations

ESG issues are credit neutral or have only a minimal credit impact on the entity(ies), either due to their nature or the way in which they are being managed by the entity(ies). For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

RATING ACTIONS

ENTITY/DEBT	RATING		PRIOR
Gainesville (FL) [Utilities]	LT IDR A+ Affirmed		A+
Gainesville (FL) /Utility System Revenues/1 LT	LT A+ Affirmed		A+
Gainesville (FL) /Self-Liquidity/1 ST	ST F1+ Affirmed		F1+

Additional information is available on www.fitchratings.com

Applicable Criteria

U.S. Public Power Rating Criteria (pub. 03 Apr 2019)
Public Sector, Revenue-Supported Entities Rating Criteria (pub. 07 Nov 2019)

Additional Disclosures

Dodd-Frank Rating Information Disclosure Form
Solicitation Status
Endorsement Policy

DISCLAIMER

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: HTTPS://WWW.FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS. IN ADDITION, THE FOLLOWING https://www.fitchratings.com/site/dam/jcr:6b03c4cd-611d-47ec-b8f1-183c01b51b08/Rating%20Definitions%20-%203%20May%202019%20v3%206-11-19.pdf DETAILS FITCH'S RATING DEFINITIONS FOR EACH RATING SCALE AND RATING CATEGORIES, INCLUDING DEFINITIONS RELATING TO DEFAULT. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE. DIRECTORS AND SHAREHOLDERS RELEVANT INTERESTS ARE AVAILABLE AT HTTPS://WWW.FITCHRATINGS.COM/SITE/REGULATORY. FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF THIS SERVICE FOR RATINGS FOR WHICH THE LEAD ANALYST IS BASED IN AN EU-REGISTERED ENTITY CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH WEBSITE.

COPYRIGHT

 In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and

competent third- party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.
The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US$1,000 to US$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US$10,000 to US$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.
For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001
Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see https://www.fitchratings.com/site/regulatory), other credit rating

subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

SOLICITATION STATUS

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

Endorsement Policy

Fitch's approach to ratings endorsement so that ratings produced outside the EU may be used by regulated entities within the EU for regulatory purposes, pursuant to the terms of the EU Regulation with respect to credit rating agencies, can be found on the EU Regulatory Disclosures page. The endorsement status of all International ratings is provided within the entity summary page for each rated entity and in the transaction detail pages for all structured finance transactions on the Fitch website. These disclosures are updated on a daily basis.