

Oglethorpe Power Corporation, Georgia

Full Rating Report

Ratings

Long-Term Issuer Default Rating **BBB+**

Outstanding Debt

Appling County Development Authority (GA) (Oglethorpe Power Corp Hatch Project) Pollution-Control Revenue Bonds	BBB+
Burke County Development Authority (GA) (Oglethorpe Power Corporation Vogtle Project) Pollution-Control Revenue Bonds	BBB+
Heard County Development Authority (GA) (Oglethorpe Power Corporation) Pollution-Control Revenue Bonds	BBB+
Monroe County Development Authority (GA) (Oglethorpe Power Corporation Scherer Project) Pollution-Control Revenue Bonds	BBB+
Oglethorpe Power Corporation (GA) First Mortgage Revenue Bonds	BBB+
Oglethorpe Power Corporation (GA) First Mortgage Revenue Bonds (Taxable)	BBB+
Oglethorpe Power Corporation (GA) CP Notes	F1

Rating Outlook

Negative

Related Research

[Fitch Affirms 'BBB+' / Negative on Oglethorpe Power Corp., GA; CP Upgraded to 'F1' on Criteria Change \(August 2019\)](#)

[U.S. Public Power: Peer Review \(July 2019\)](#)

[U.S. Public Power Rating Criteria Update \(The First 60 Days\) \(June 2019\)](#)

Analysts

Kathryn Masterson
+1 512 215-3730
kathryn.masterson@fitchratings.com

Dennis Pidherny
+1 212 908-0738
dennis.pidherny@fitchratings.com

Analytical Conclusion

The 'BBB+' rating reflects higher leverage, and ultimately higher rates to members, that will result from Oglethorpe Power Corporation's (OPC) ongoing investment in a 30% share (660MW) of Vogtle Units 3 and 4. OPC's \$7.5 billion budget, adopted in September 2018, includes an \$800 million project-level contingency, OPC's financing costs and its own contingency reserve, all of which provide some protection from further project increases beyond the approximately \$27 billion total project cost.

The 'BBB+' rating also incorporates the credit quality of the largest of OPC's 38 members, who collectively serve 1.9 million customer meters in Georgia, and Fitch Ratings' expectation that affordability will weaken with completion of Vogtle. OPC's largest members have competitive rates and exhibit high affordability, as measured by annual energy costs compared with median household income. However, once Vogtle construction is complete, OPC wholesale rates to members participating in the project will increase in 2021 and 2022, and will outpace similar increases anticipated for neighboring Georgia Power Company (GPC) customers. GPC determined it will not seek rate recovery for its \$700 million share of the cost increase announced in 2018.

The Negative Outlook reflects the potential for further weakening in credit quality if sizable additional cost increases occur and exceed contingency reserves. The Negative Outlook indicates Fitch's skepticism about the resilience of the revised project estimate and the remaining time and milestones prior to project completion.

Key Rating Drivers

Revenue Defensibility: 'aa'; Unconditional, Project-Based Wholesale Power Sales Contracts

OPC's revenue defensibility assessment reflects the strong contractual underpinnings supporting electric business revenues collected from 38 members, the legal ability to raise wholesale electric rates on member sales, and the strong credit quality of contracted members. Fitch expects OPC's rate formula will provide for timely cost recovery when Vogtle Units 3 and 4 enter commercial operation, and the full costs of those units will be passed through to members participating in the project.

Operating Risk: 'a'; Low Operating Costs with Upward Pressure

Operating costs averaged just above 5.0 cents/kWh over the past five years and are considered low. Operating costs are expected to remain low given the diversified portfolio of generation assets. The existing fleet's capital requirements are moderate and supported by ongoing capex. Project-completion risk at Vogtle Units 3 and 4 represents an asymmetric rating factor consideration in the operating risk assessment given the ongoing cost and timeline uncertainty associated with the project.

Financial Profile: 'bbb'; High Leverage Associated with Vogtle Construction

OPC's financial margins and liquidity position are stable, and management's commitment to achieving interest coverage margins of 1.14x through the final year of Vogtle construction (above its legal requirement of 1.1x) should continue to produce healthy margins during construction. However, the nuclear expansion resulted in significant debt financing and high leverage. Fitch expects another approximately \$4 billion in new debt through 2023, which will elevate leverage further until large rate increases, anticipated in 2021 and 2022, bring the leverage ratio back around 11.0x.

Rating History

IDR	Action	Outlook/ Watch	Date
BBB+	Affirmed	Negative	8/6/19
BBB+	Downgraded	Negative	10/12/18
A-	Affirmed	Negative Watch	8/10/18
A-	Affirmed	Stable	1/19/18
A-	Downgraded	Negative Watch	9/6/17
A	Affirmed	Negative	4/5/13
A	Affirmed	Stable	10/18/04
A	Assigned	—	3/12/97

IDR – Issuer Default Rating.
Source: Fitch Ratings.

Rating Sensitivities

Delays and Further Cost Increases: A delay in the Vogtle project completion dates beyond November 2022 and project cost increases exceeding the existing project contingency funds would likely drive leverage and electric rates higher than expected, resulting in a downgrade. Conversely, if there is greater certainty that any additional cost increases or timing delays will not be significant, the Rating Outlook could return to Stable, even if construction is not complete.

Credit Profile

OPC provides partial wholesale electric service to 38 member cooperatives located throughout Georgia. OPC members collectively serve a vast region covering approximately 38,000 square miles — 65% of the state’s land area — encompassing 151 of the state’s 159 counties. The member service territory exhibits considerable size, breadth and diversity.

OPC has a large and diverse generation portfolio of approximately 8,400MW of generation capacity, member-owned resources and federal hydropower allocations. The portfolio provides a balanced mix of nuclear, natural gas and coal-fired resources to meet a portion of total member load requirements that grew at an average of 0.7% per year over the past five years. OPC’s members are responsible for procuring any remaining energy requirements.

Construction is ongoing at Vogtle Units 3 and 4, the only active construction of a new nuclear plant in the U.S. under the direction of Southern Nuclear Company. OPC is participating in the Vogtle nuclear expansion project with three other co-owners: GPC (45.7% share), the Municipal Electric Authority of Georgia (22.7%) and the city of Dalton utilities (1.6%). OPC’s 30% share of Vogtle Units 3 and 4 is expected to provide OPC with 660MW of additional capacity when completed. It will be used to serve a greater share of member load and is expected to displace supply currently contracted with alternate providers.

Revenue Defensibility

Revenue source characteristics are very strong, based on substantially similar amended and restated wholesale power contracts with each member that extend through Dec. 31, 2050. The contracts are take-or-pay and require unconditional payment, regardless of project operation, including the explicit circumstance of resource construction suspension. The contracts continue in effect after 2050 unless terminated with three years’ notice by either OPC or the member. There is no termination option prior to 2050.

The contracts include a fixed initial subscription amount — the percentage capacity responsibility (PCR) — for each member on each generation resource. Not all members participate in each OPC project, including the construction of Vogtle 3 and 4. None of OPC’s projects include all 38 members, but the projects all benefit from participation by most members. No project has fewer than 30 participants. The contracts allow for a discretionary assignment process that allows members to transfer their PCRs in certain projects to other members willing to take an additional share of the project. It is only permitted when there is sufficient interest from other members and has occurred for certain projects.

In the event of a participant payment default, a shortfall would occur in each of the projects for which the participant has a PCR. The wholesale contracts have a step-up process that allocates defaulted amounts to the remaining nondefaulting members in proportion to their PCR in each resource. In the event of a payment default by all members of a particular resource, the contracts require the nonparticipating members in that resource to be billed for the default.

Related Criteria

- [Public Sector, Revenue-Supported Entities Rating Criteria \(May 2019\)](#)
- [Short-Term Ratings Criteria \(May 2019\)](#)
- [U.S. Public Power Rating Criteria \(April 2019\)](#)
- [U.S. Public Finance Short-Term Debt Rating Criteria \(November 2017\)](#)

The contracts are not all-requirements but instead allocate only OPC's existing generation portfolio and Vogtle 3 and 4, which are under construction. New resources constructed at OPC must have approval of at least 75% of the board, 75% of the members and members representing 75% of patronage capital. Members are responsible for acquiring any supplemental power supply. OPC supplied only 57% of the total retail energy requirements of members in 2018. Once Vogtle 3 and 4 enter commercial operation, this percentage is expected to increase to 65% by 2023.

Rate Flexibility

Rate flexibility is very strong, supported by OPC's rate authority, which allows the board to establish its own rates and requires them to be reviewed annually. Neither OPC's wholesale rates nor member retail rates are subject to regulation or approval of any federal or state authority, including the Federal Energy Regulatory Commission or the Georgia Public Service Commission (GPSC).

OPC's formulary rate schedule, as permitted under the wholesale power contracts, includes two components. The first, the capacity charge, recovers OPC's fixed costs based on each member's fixed percentage of each OPC project in which the member participates. The second, the energy charge, recovers variable costs related to actual fuel, operating and purchased energy costs. The rate formula allows for 30- to 60-day recovery on the energy cost component and bills the capacity charge on a level basis with a prior-period adjustment mechanism to ensure OPC achieves its required minimum margin for interest coverage of 1.1x, as required by the first mortgage indenture. The OPC board approved recovery of 1.14x during nuclear construction.

Rate Competitiveness

OPC's average member rate is historically lower than, but competitive with, GPC's retail rate. OPC's member average was 11.3 cents/kWh in 2018, compared with GPC's rate of 11.7 cents/kWh. This relationship reflects the common ownership of the state's largest generating resources and the high-voltage transmission system. However, GPC's rates include the financing costs of Vogtle, whereas OPC is largely capitalizing all costs, with the exception of some elective rate programs that allow members to smooth in the rate impact of Vogtle by expensing some amounts prior to the in-service date.

OPC's forecast wholesale power costs are an important consideration in its future revenue flexibility. OPC's power cost projections indicate wholesale rates will rise following a period of stability through 2020 to the mid-to-high 7 cents/kWh range by 2023 from the mid-6 cents/kWh range, although this estimate does not incorporate rate-management programs in use by certain members.

Fitch historically expected OPC member rates would remain in line with the state's other utilities, which should experience similar cost increases related to Vogtle participation. However, GPC's decision in 2018 that it would not pass the \$700 million cost increase through to its ratepayers, but would instead fund the increase through equity, will disrupt the commonality of the rate trend among the co-owners. Fitch is concerned GPC could treat possible further cost increases similarly, widening the disparity between OPC member rates and those of GPC retail ratepayers.

Rate-Management Programs

OPC offers two optional rate-management programs to its members designed to smooth the rate impact associated with the Vogtle project during the initial years of operation (2023–2027). A total of 17 members participate to some degree in one of the rate-management programs, while other members designed their own strategies to incorporate the higher capacity charges expected by 2023. Although the funds in the rate-management programs are small in relation to overall project cost, the programs provide a prudent step for members to manage the magnitude of rate increases in the initial years, which may be unpopular.

Purchaser Credit Quality

OPC's Largest Members Exhibit Strong Purchaser Credit Quality

There is little concentration among the two largest members. Cobb Electric Membership Corp. (EMC) and Jackson EMC each accounted for approximately 14% of OPC's total revenues in fiscal 2018. None of the other members accounted for more than 10% of revenues individually.

Fitch's review of OPC's five largest members indicates credit characteristics that generally include service areas with strong customer growth over 1.5%, favorable service area demographics, rates competitive with the state average, and high rate affordability between 1.5% and 3.0% of median household income. Financial profiles are adequate, with sizable leverage — including a portion of OPC's debt — and limited liquidity levels, which is typical for electric cooperatives.

The territory served by OPC members is largely rural, although some members serve suburban regions surrounding the state's largest cities, including Atlanta. Member energy sales are heavily weighted toward residential consumers at around 65% of total sales, with small commercial and industrial consumers accounting for much of the remainder. There is no significant retail customer concentration given the size and diversity of the membership.

Members generally have the exclusive right to serve customers within their respective territories. However, certain large industrial and commercial customers in Georgia with loads of more than 900kW have been allowed to receive electric service from the provider of their choice since 1973. This limited form of retail competition had no meaningful impact on OPC member sales, nor is it expected to. There is no expectation of broader retail competition in Georgia.

Operating Risk

Operating costs averaged a low 5 cents/kWh over the five years ending 2018. OPC's diverse mix of generation assets results in a low-cost portfolio for members, and costs benefited from low natural gas prices over this period, similar to many electric utilities in the U.S. Fitch expects operating costs to remain low but trend higher with the addition of Vogtle Units 3 and 4. While nuclear plant operating costs are low, the capital cost is embedded in Fitch's calculation of operating cost through the inclusion of depreciation.

Operating Cost Flexibility

OPC has direct ownership interests in 30 individual generating units that provide the cooperative with a well-diversified portfolio of 7,060MW of planning reserve capacity to supply member needs. OPC also operates two combustion turbine facilities, comprising six units totaling 731MW, owned by Smarr EMC, a cooperative owned by 35 of the 38 OPC members,

and manages 529MW of Southeastern Power Administration hydroelectric allocations on behalf of the members.

The cooperative's natural gas-fired and dual-fueled generating units represent the largest segment of generating capacity (3,474MW, 49% of owned capacity), given the cooperative's recent asset acquisitions of the Hawk Road, Hartwell, Smith and Doyle energy facilities. Although OPC's coal-fired and nuclear units historically accounted for the majority of energy supplied to members, once energy from the Smith and Hawk Road facilities was dispatched to meet member requirements beginning in 2016, natural gas-fired units supplied over 40% of energy requirements. Nuclear energy also accounted for 40% of OPC's energy mix in 2018, with coal and hydro providing 16% and 4%, respectively.

Capital Planning and Management

Capital spending was substantial in recent years and is reflected in a low age of plant, as calculated by Fitch, of 12 years. Capex exceeded 200% of annual depreciation in four of the last five years. Future capital spending is estimated at \$4.7 billion for fiscals 2019-2023 and will continue to be dominated by Vogtle-related expenditures of \$2.7 billion (2019-2022).

The non-Vogtle expenditures are for environmental projects at the coal-fired Wansley and Scherer units, nuclear fuel, ongoing investment at other plants and financing costs. Although both Wansley and Scherer are compliant with most prevailing regulations, including Mercury and Air Toxics Standards, expenditures related to coal ash disposal and water treatment will be necessary. OPC's share of the coal ash disposal is estimated at below \$500 million. Total capex is expected to decline significantly in 2023, following the projected completion of Vogtle 3 and 4.

Asymmetric Rating Factor Consideration for Operating Risk — Vogtle Completion

Construction at Vogtle experienced multiple construction cost increases and timing delays. Fitch believes additional cost increases and potential schedule delays are possible at the project given the ongoing nuclear construction risk, lengthy timeline until completion and historically unreliable cost estimates. These risks are incorporated as an asymmetric rating factor consideration in the operating risk assessment to reflect ongoing project-completion risk.

The most recent construction cost increase occurred in 2018, shortly after the bankruptcy of Westinghouse Electric Company and assumption of project construction by Southern Nuclear and Bechtel. OPC adopted a revised budget in September 2018 equal to \$7.5 billion for its 30% share. The \$7.5 billion budget was an increase from \$7.0 billion announced less than one year prior, and a sizable increase over the previous \$5.0 billion budget under the fixed-price contract.

The co-owners also reached a cost-sharing agreement in September 2018 that limits OPC's additional investment under certain scenarios. The co-owners have an option to freeze spending if project costs are more than \$2.1 billion above the current total project budget of approximately \$27 billion, and GPC would finance the remaining construction amount. While the cost sharing mechanisms reduce the scope of OPC's additional investment, higher leverage and potentially reduced ownership in the project could still result.

April 2019 Baseline Review of Budget and Timeline

GPC and Southern Nuclear completed a baseline review of the budget and timeline in April 2019 and submitted those results to the GPSC. While Vogtle 3 and 4 have in-service dates of November 2021 and November 2022, respectively, that were approved by the GPSC, Southern Nuclear has been working toward earlier in-service dates, with a strategy designed to finish the project as soon as possible. There were no material budget changes noted in the baseline review.

Southern Nuclear reported at the end of June that the project is approximately 79% complete and there has been no allocation of the project contingency to date. GPSC staff released comments on the baseline review in July 2019 indicating the belief that the earlier May completion dates are not achievable and the approved November dates will be challenging to achieve. Staff further commented that the current cost forecast is achievable due to substantial cost and schedule contingency, but the full project contingency will likely be spent.

Financial Profile

Financial performance has been consistently healthy over the last three years, with Fitch-calculated coverage of full obligations over 1.5x after reducing debt service. However, debt service costs do not include any costs related to Vogtle construction yet because interest costs are being capitalized until commercial operation. Strong margins and cash flow are the result of OPC's 1.14x margins for interest (MFI) target being used to set rates during Vogtle 3 and 4 construction, and they are expected to continue through 2022.

Liquidity levels are strong with over 150 days' cash on hand. Including available lines of credit, liquidity is over 700 days. These robust ratios reflect OPC's strategy of maintaining borrowing capacity sufficient to complete its planned construction program. The cooperative maintains access to \$1.61 billion of committed credit facilities, although this is down from its peak of nearly \$2 billion in 2014. Fitch views capital access as important due to the construction program's magnitude.

OPC's debt portfolio increased substantially after nuclear construction began in earnest in 2012. Debt outstanding at the end of 2018 was approximately \$9.4 billion, up from \$5.6 billion at the end of 2012. The increase is primarily the result of OPC's investment in Vogtle 3 and 4. Leverage — measured by net adjusted debt/adjusted funds available for debt service — is elevated. The leverage ratio was 11.3x at the end of fiscal 2018, but is somewhat overstated as it includes Vogtle-related debt, for which costs are being capitalized and not yet recovered from members.

Fitch FAST Analysis Results

Under the Fitch Analytical Stress Test (FAST) base case scenario, leverage continues to increase through Vogtle construction, but declines to between 10.0x and 11.0x in 2022 once rates begin to recover financing costs. While higher levels in the next few years are outside the range for the current 'BBB+' rating, potentially between 13.0x and 15.0x, Fitch's FAST is focused on the level at which leverage will stabilize following commercial operation. Leverage of around 11.0x is supportive of the 'BBB+' rating given OPC's revenue defensibility and operating risk profiles. The current rating reflects Fitch's expectation that leverage may increase slightly in 2023 when OPC returns to billing for 1.1x MFI from the 1.14x in place during construction, but should continue to support the current rating.

Fitch's base case analysis used key assumptions outlined in OPC's long-range financial forecast, including future load growth of less than 1% annually until Vogtle 3 and 4 enter

commercial operation in fiscals 2022 and 2023, respectively, and member sales increase to participants entitled to that project output. Additional assumptions include sizable rate increases to members in 2022 and 2023 when the Vogtle units enter commercial operation. Additional assumptions regarding future debt issuance and capex levels reflect the current \$7.5 billion Vogtle budget and timing.

Fitch's FAST rating case applies stress by imposing reductions to the cooperative's energy sales for two years, followed by a three-year recovery based on OPC's historical energy sales trends. The rating case holds other key assumptions at the base case level other than higher rate adjustments that would occur through OPC's rate formula to recovery sufficient revenues to comply with financial policies. The rating case indicates OPC's financial profile remains similar to base case results through the five-year period, although the resulting wholesale rate increases will generate further pressure on rate affordability at the member level.

The Negative Outlook is not based on the base case or rating case outcomes. It reflects the potential for materially higher construction costs than those estimated in the current budget given the ongoing cost and timeline uncertainty of the Vogtle Units 3 and 4 nuclear construction. The base case and rating case are predicated on the current budget.

Debt Profile

OPC's debt totaled \$9.35 billion at Dec. 31, 2018. The largest share of debt — \$4.37 billion — is financed through the Federal Financing Bank (FFB) and guaranteed by the Rural Utilities Service (RUS). OPC also has first mortgage bonds outstanding of \$3.56 billion and pollution control bonds of \$981 million.

Of the \$4.37 billion FFB debt, \$1.79 billion is guaranteed by the DOE in accordance with the DOE's amended and restated loan agreement with OPC, in which the DOE agreed to secure up to \$3.057 billion in FFB notes in exchange for a secured interest in OPC's share of the Vogtle project. OPC's obligations on the DOE-secured notes are on parity with other obligations issued under the mortgage indenture, including FFB debt, first mortgage bonds and pollution-control bonds. OPC and the DOE amended the existing loan agreement further in March 2019 to provide an additional \$1.62 billion guarantee from the DOE in light of the Vogtle cost escalation. Remaining DOE authorization is consequently expected to cover all but approximately \$770 million of the additional financing still needed for Vogtle. The remainder would be issued as taxable bonds, and could be higher or lower, depending on the final cost in comparison to the current budget.

OPC participates in the RUS Cushion of Credit program that allows it to deposit funds with the U.S. Treasury that are restricted for future RUS/FFB debt service payments. Approximately \$653 million held in this program was reflected on the balance sheet as of Dec. 31, 2018. Recent changes in the Cushion of Credit program eliminate participants' ability to add new deposits to the program, limit balances to regular RUS debt service payments beginning in 2020 and reduce interest paid on program balances (from 5% currently in effect) beginning in 2020. OPC expects to draw balances in the fund down over time as the economic advantages of retaining large balances in the program are reduced.

Short-Term Rating

The upgrade of OPC's CP program rating to 'F1' reflects the application of Fitch's revised short-term rating criteria. OPC is able to achieve the higher of the two available short-term ratings at its long-term Issuer Default Rating of 'BBB+' based on its ability to maintain a minimum liquidity ratio of 1.25x, revenue defensibility assessment of 'aa', and neutral

assessments for liquidity profile and debt characteristics. Fitch expects the liquidity coverage ratio will remain adequate for the 'F1' rating.

Internal liquidity as of June 30, 2019 consisted of approximately \$411 million of cash and investments, and available capacity under its \$1.21 billion syndicated revolver to support the CP program. The syndicated credit facility consists of commitments from 13 banks, available through March 23, 2020. Management expects to renew the facility by the end of fiscal 2019. OPC uses the facility to provide short-term financing and to support the CP program.

Financial Summary — Oglethorpe Power Corporation, Georgia

(\$'000, Audited Fiscal Years Ended Dec. 31)

	2014	2015	2016	2017	2018
Net Adjusted Debt to Adjusted FADS (x)	12.02	12.38	10.71	10.06	11.32

Net Adjusted Debt Calculation

Total Short-Term Debt	234,369	261,478	102,168	190,626	0
Total Current Maturities of Long-Term Debt	160,754	189,840	316,861	216,694	522,289
Total Long-Term Debt	7,213,456	7,387,655	7,984,932	8,014,754	8,808,878
– Restricted Funds – Cushion of Credit	365,447	387,894	468,128	882,909	653,158
Total Debt	7,243,132	7,451,079	7,935,833	7,539,165	8,678,009
+ Capitalized Fixed Charge – Purchased Power	172,318	136,620	129,859	143,990	152,323
– Total Unrestricted Cash	237,391	213,038	366,290	397,695	752,618

Adjusted FADS for Leverage Calculation

Total Operating Revenue	1,408,163	1,349,825	1,507,231	1,434,196	1,480,113
Total Operating Expenses	1,148,766	1,092,367	1,251,567	1,195,326	1,255,137
Operating Income	259,397	257,458	255,664	238,870	224,976
+ D&A	313,449	313,320	362,716	374,411	371,234
+ Interest Income	36,791	40,424	51,656	56,122	60,055
+ Other Noncash Charges	(33,810)	(32,480)	32,361	36,674	38,090
FADS	575,827	578,722	702,397	706,077	694,355
+ Adjustment for Purchased Power	21,540	17,078	16,232	17,999	19,040
Coverage of Full Obligations (x)	1.45	1.42	1.88	1.56	1.54
FADS	575,827	578,722	702,397	706,077	694,355
+ Adjustment for Purchased Power	21,540	17,078	16,232	17,999	19,040

Full Obligations Calculation

Cash Interest Paid	237,107	240,817	212,574	251,186	245,085
Prior-Year Current Maturities	152,153	160,754	152,488	194,241	198,017
Total Annual Debt Service	389,260	401,571	365,062	445,427	443,102
+ Adjustment for Purchased Power	21,540	17,078	16,232	17,999	19,040

Liquidity Cushion (Days)	618	640	739	780	771
Unrestricted Cash (Days)	100	96	156	185	325

Liquidity Calculation

+ Total Unrestricted Cash	237,391	213,038	366,290	397,695	752,618
+ Total Borrowing Capacity	1,720,000	1,720,000	1,720,000	1,720,000	1,720,000
– Amounts Unavailable	486,369	510,200	351,400	442,000	685,700

Cash Operating Expense Calculation

Total Operating Expense	1,148,766	1,092,367	1,251,567	1,195,326	1,255,137
– D&A	313,449	313,320	362,716	374,411	371,234
– Other Noncash Charges	(33,810)	(32,480)	32,361	36,674	38,090
Cash Operating Expenses	835,317	779,047	888,851	820,915	883,903

FADS – Funds available for debt service. D&A – Depreciation and amortization.

Sources: Fitch Ratings, Fitch Solutions, Lumesis, U.S. Energy Information Administration, Oglethorpe Power Corporation, Georgia.

Key Definitions		
Terms	Definition	Significance
Issuer Default Rating (IDR)	An expression of overall enterprise risk and relative vulnerability to default.	Provides an opinion of the relative ability of an entity to meet financial commitments, expressed as an ordinal measure of credit risk.
Net Adjusted Debt	Adjusted debt – unrestricted cash – funds restricted for debt service	Provides an inclusive evaluation of long-term liabilities offset by funds available for debt service.
Adjusted FADS	EBITDA + interest income + 30% of purchase power expense + operating lease expense – transfers/distributions + pension expense	Provides an indication of cash flow available for the payment of debt service, adjusting for purchased power, operating lease and pension obligations.
Net Adjusted Debt to Adjusted FADS	Net adjusted debt / adjusted FADS	Provides an indication of net total leverage position against available operating cash flow.
Full Obligations	Cash interest paid + scheduled long-term principal payments + 30% of purchase power expense	Provides an indication of inclusive fixed and debt service obligations.
Coverage of Full Obligations	(EBITDA + interest income + 30% of purchase power expense + operating lease expense – transfers/distributions) / full obligations	Provides an indication of the relative cushion of operating cash flow to fixed charges.
Base Case	The expected forward-looking case in the current macro-economic environment.	Provides the analytical starting point in the forward-looking analysis, and also informs the rating case.
Rating Case	The potential performance under a common set of assumptions.	Illustrates how cycles affect individual issuers differently, and informs the level of rating stability and credit resiliency.

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.

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: [HTTPS://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS](https://fitchratings.com/understandingcreditratings). IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEB SITE AT WWW.FITCHRATINGS.COM. 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. 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 © 2019 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. 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.