

CREDIT OPINION

29 June 2018



Contacts

Julie E Meyer +1.214.979.6855

Analyst

julie.meyer@moodys.com

Kurt Krummenacker +1.212.553.7207

Senior Vice President/Manager kurt.krummenacker@moodys.com

CLIENT SERVICES

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

Brownsville Public Utility Board, TX

Update to credit analysis

Summary

Brownsville Public Utility Board's (A2 stable) credit profile benefits from ample liquidity and strong financial ratios yet is constrained by a service area with an above average poverty rate and structurally high unemployment. The ramp up in cash flow in recent years follows a series of rate increases for the utility's planned acquisition of a 25% ownership interest in a 800 MW natural gas combined cycle power plant being developed by Tenaska. However, the project has been put on hold due to unfavorable market conditions for constructing this type of facility. The enterprise's debt ratio is below average at 33%, but if the project proceeds, management expects to issue about \$225 million to finance Brownsville's share. This represents an 85% increase over currently outstanding debt. How the potential new debt is structured; the retail rate impact of the project and how it fits into the competitive energy marketplace are future rating considerations.

Credit strengths

- » BPUB has demonstrated a willingness to adequately raise rates in anticipation of future capital projects while outperforming financial forecasts
- » Recent rate increases resulted in the accumulation of a robust 556 days cash on hand
- » The utility benefits from ERCOT's nodal pricing due to BPUB's facilities located in the congested north while its users are in the south, resulting in additional revenue
- » The \$100 million commercial paper program provides low cost initial funding for capital projects and could be used for working capital

Credit challenges

- » Leverage will significantly increase due to a planned natural gas generation project if the project moves forward, accompanied by possible construction risk and wholesale power market risk
- » Possible increased reliance on market based revenues to meet budget may lead to lower credit metrics in the future if market based margins are not realized
- » Rates for the commercial customers in the electric system are very high compared to the state average and could discourage commercial development

Rating outlook

The stable outlook is based on our expectation that BPUB will maintain strong liquidity and coverage levels that provide a key mitigant to the ongoing capital projects necessary to ensure system capacity is maintained to accommodate projected growth.

Factors that could lead to an upgrade

- » Sustained economic expansion and median income growth
- » Maintenance of strong financial margins exclusive of off-system sales after completion of the Tenaska project

Factors that could lead to a downgrade

- » Significant increase in wholesale power market exposure
- » Assumption of unmitigated construction risk through the Tenaska project
- » Deterioration of financial performance, such that fixed obligation charge coverage (FOCC) ratio and days cash on hand fall below 1.5x and 300 days on a sustained basis

Key indicators

Exhibit 1
Brownsville Public Utility Board, TX

	2013	2014	2015	2016	2017
Total Sales (mWh)	1,279,496	1,300,589	1,276,414	1,300,029	1,320,697
Debt Outstanding (\$'000)	307,585	306,483	293,832	278,564	279,650
Debt Ratio (%)	39.4%	38.1%	35.7%	33.0%	33.1%
Total Days Cash on Hand (days)	512	447	479	525	556
Adjusted Debt Service Coverage (x) (Post Transfers/PILOTs - All Debt)	1.87	2.01	2.58	2.30	1.87
Fixed Obligation Charge Coverage (if applicable)(x)	1.79	1.93	2.45	2.20	1.80

Source: BPUB annual financial statements; Moody's Investors Service

Profile

BPUB is wholly owned by the City of Brownsville (GO rated Aa3) and provides electric, water, and wastewater utility services to the City of Brownsville and surrounding areas. The system operates a fully integrated electric generation, transmission, and distribution system, and approximately 96% of the city and all of the developed areas of the Port of Brownsville are within its singly certified area.

Detailed credit considerations

Revenue generating base: Improving economy; relatively low income customer base

Although improving down from double digits as recently as 2013, Brownsville's unemployment rate remains above average at 6.7% as of March 2018, compared with the state rate of 4.1% for the same period. According to Moody's Economy.com, secular trends such as a favorable age structure and high birth rate will support the Brownsville-Harlingen economy over the long-term. The metro area's fast growing healthcare sector in particular will benefit due to demand for medical services. Additionally, rising oil prices are good for rig production, which represents the largest share of factory jobs. Still, median family income is 58% and 56% of the state and nation, respectively, and relatively low educational attainment and a large base of immigrant labor will prevent meaningful gains in closing the gap.

BPUB's peak electric demand was at about 284 MW in fiscal 2017. Electric sales rose 2% in fiscal 2017, mostly due to rising residential demand, and represented 77% of total operating revenue. Water and wastewater sales were 12% and 11% of revenues, respectively.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Electric, water and waste water sales are not overly reliant on the top ten customers, who account for 15%, 13% and 8%, respectively, of the revenues for each utility. The introduction of wind is diversifying the enterprise's resource profile. The board recently entered into a power purchase agreement (PPA) for a wind project with a 78 MW nameplate capacity and began selling energy from the project in fiscal 2016. The board's generation capacity as of fiscal 2017 stood at 58% gas, 33% coal and 9% wind. Its energy mix is 32% gas, 24% coal, 20% wind and 24% market purchases.

Operational and financial performance: Coverage and liquidity bolstered by rate increases

BPUB's FOCC moderated to 1.80x in fiscal 2017 compared with a recent 2.45x peak in fiscal 2015 mainly because of fluctuations in revenues from off-system sales and rate stabilization expenses associated with a bill reduction plan that was initiated in fiscal 2016. Fiscal 2018 is projected to end with FOCC of 2.92x. New bonds for the Tenaska Brownsville project will likely dilute coverage.

Moody's calculation of FOCC is based on net revenues of the combined electric, water and wastewater system. The annual net transfer to the city is treated as an operating expense. In addition, the annual debt related payment to the <u>Southmost Regional Water Authority</u> (A2 stable) is adjusted as a debt service payment rather than an operating expense. This adjustment is due to the take-or-pay nature of the contract, along with the fact that the board is required to purchase any other defaulting minority member's share of the plant should they not pay. The board also operates the plant and has a 92.91% ownership interest.

During fiscal 2017, the board implemented the last of the five approved annual rate increases in order to fund the purchase of 200 MW capacity from the Tenaska Brownsville project. Electric base rates were increased by 7% in fiscal 2017. A 6% water rate increase was also implemented. No rate increases were approved for the fiscal 2018 budget.

The Tenaska Brownsville project has been delayed due to unfavorable market conditions stemming from low natural gas prices and increasing wind generation that have hindered subscription progress on Tenaska's 600 MW share of the facility. Starting in fiscal 2016, the board implemented the bill reduction plan to set the fuel and purchased energy charge (FPEC) at a rate that maintains an average residential electric bill of \$102 based on 1,000 kWh of electric consumption. The board reviews and adjusts the FPEC on a monthly basis. To supplement FPEC collections for the bill reduction plan, the board used \$24.2 million in fiscal 2017 and \$10.5 million in fiscal 2016 from excess cash flows generated by the rate increases.

Tenaska manages BPUB's wholesale energy market interactions. Cash flow and margins from wholesale activities resulted in moderate FOCC fluctuations in recent years. About 8% of total operating revenues for the combined utility were derived from off-system electric sales in fiscal 2016 followed by 4% in fiscal 2017. The board budgeted for off-system sales revenue to provide 3.4% of total revenue in fiscal 2018. This revenue stream benefits from the nodal market. BPUB's generation assets are located in the northern ERCOT zone which is more congested, whereas the actual service territory is in the southern zone near the Texas-Mexico border.

LIQUIDITY

Liquidity improved for the third consecutive year in fiscal 2017 to 556 days cash on hand and \$202.3 million unrestricted and discretionary reserves, up from 525 days in fiscal 2016. Liquidity is projected to increase modestly at the end of fiscal 2018 as well. BPUB has a \$100 million commercial paper program backed by a letter of credit (LOC) provided by MUFG Union Bank, N.A. (Issuer A2 stable/P-1). Access to this additional source of liquidity benefits the enterprise because it provides low cost initial funding for capital projects. However, we did not adjust days cash on hand to incorporate the commercial paper program because the LOC contains a material adverse change clause related to financial conditions.

BPUB's liquidity profile is well above the 200 days cash median for similarly rated utilities. The stronger liquidity partially mitigates the expected increase in leverage should the Tenaska Brownsville project go forward.

Debt and other liabilities: Planned natural gas project will result in significant additional leverage if approved

Debt outstanding totaled \$279.7 million as of fiscal 2017, including \$1 million in junior lien bonds as well as a \$14 million commercial paper balance. This represents a low debt ratio of 33.1%.

Debt will significantly increase if the Tenaska Brownsville project moves forward. Management anticipates \$225 million of debt will be needed to fund the utility's share of the project and ancillary infrastructure including a gas pipeline. Management has already set aside \$29 million for BPUB's equity contribution. Construction has been delayed due to unfavorable market conditions for this type of plant.

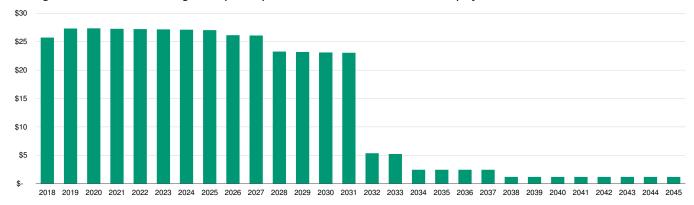
Exclusive of the Tenaska Brownsville project, the enterprise's five-year capital improvement plan identifies \$160.2 million needed for projects through 2022 including \$49.2 million for the electric system, \$51 million for water and \$60 million for wastewater. Of the total \$160.2 million, approximately \$93.3 million (58%) is expected to be debt financed.

DEBT STRUCTURE

All of the debt is fixed rate. Apart from a 6% increase to \$27 million in fiscal 2019, annual debt service requirements are declining through final maturity in 2045.

Exhibit 2

Declining debt service structure mitigates impact of potential debt for Tenaska Brownsville project



Source: Moody's Investors Service; BPUB

DEBT-RELATED DERIVATIVES

None.

PENSIONS AND OPEB

BPUB participates in the nontraditional, joint contributory, hybrid defined benefit pension plan administered by the Texas Municipal Retirement System (TMRS). Moody's adjusted net pension liability (ANPL) for the system, under our methodology for adjusting reported pension data, is \$106.4 million. This is higher than the reported net pension liability of \$34.6 million. The adjusted debt ratio, which includes the ANPL, is 46.3% which is in line with similarly rated peers.

Moody's ANPL reflects certain adjustments we make to improve comparability of reported pension liabilities. The adjustments are not intended to replace BPUB's reported contribution information, or the reported liability information of the plans, but to improve comparability with other rated entities.

Management and governance

BPUB was formed in 1960 to provide electric, water, and wastewater services to its customers in the Brownsville area. The City's charter provides that the management, operation, and control of the City's combined water, wastewater, and electric utilities system be delegated to BPUB. The Board is comprised of seven members, six of whom are appointed by the City Commission for four-year terms, and the seventh member being the City's Mayor serving Ex-officio.

Rating methodology and scorecard factors

The grid is a reference tool that can be used to approximate credit profiles in the industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see US Public Power Electric Utilities With Generation Ownership Exposure for information about the limitations inherent to the grid.

Exhibit 3

Methodology Scorecard

Factor	Subfactor	Score	Metric
Cost Recovery Framework Within Service Territory		Baa	
Willingness and Ability to Recover Costs with Sound Financial Metrics		А	
3. Generation and Power Procurement Risk Exposure		А	
4. Competitiveness	Rate Competitiveness	Ваа	
5. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	Aaa	520
	b) Debt ratio (3-year avg) (%)	Aaa	34%
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)	Aa	2.15
Preliminary Grid Indicated Rating from Grid Factors 1	I-5	A2	
		Notch	
6. Operational Considerations			
7. Debt Structure and Reserves			
8. Revenue Stability and Diversity			
Grid Indicated Rating		A2	

Source: Moody's Investors Service

© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE. HOLDING, OR SAIF.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

 $MJKK \ and \ MSFJ \ also \ maintain \ policies \ and \ procedures \ to \ address \ Japanese \ regulatory \ requirements.$

REPORT NUMBER

1126478

Contacts

Julie E Meyer Analyst

julie.meyer@moodys.com

+1.214.979.6855

Kurt Krummenacker +1.212.553.7207 Senior Vice President/

Manager

kurt.krummenacker@moodys.com

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

