Burlington (City of) VT Electric Enterprise
New Issue: Moody's assigns A3 to Burlington, Vermont Electric Revenue Bonds; outlook stable

Summary Rating Rationale
Moody's Investors Service has assigned an A3 rating to the City of Burlington Electric Enterprise, Vermont’s sale of $4,730,000 Electric System Revenue Refunding Bonds, 2017 Series A and A3 rating on the $5,665,000 Taxable Electric System Revenue Refunding Bonds, 2017 Series B. The sale is expected in December 2017. The bonds will advance refund certain maturities of Electric System Revenue Bonds, Series 2011 A and B. Moody's also maintains the A3 rating on the utility's outstanding $29.7 million electric revenue bonds at A3. The outlook is stable.

Considered in the A3 rating is the improved liquidity and debt service coverage ratios achieved over the past several fiscal years and forward-looking financial policies aimed at maintaining sound financial metrics. Also recognized is the utility's competitive rates, diverse power supply mix that is significantly renewable and the strengthening of the Burlington, Vermont economy. Fixed obligation charge coverage in FY 2017 was 1.62x.

Burlington Electric Department (BED) serves Burlington, which has a diverse local economy anchored by the institutional presence of a major university and medical center, in addition to serving as the commercial center for a large geographic area. While BED is subject to Vermont Public Utilities Commission (PUC) regulation, revenues from new rates may be collected 45 days after the filing a rate request and the PSB must consider bond covenants and sufficiency of revenues to support voted bonded authorizations. Moreover, BED's rate setting record has been credit supportive and timely, with full recovery of requested costs since 2004, which Moody's views as a key credit strength. The rating further considers the utility's conservative general fund transfer policy, representing roughly 3.5% of FY17 operating revenues.

Credit Strengths
» Diverse and substantially renewable power supply resource mix, which mitigates industry challenges such as market price disruptions and carbon regulation

» Strong improvement in liquidity and debt service coverage over the past several fiscal years and forward-looking financial policies aimed at maintaining sound financial metrics

» BED's service area economy is relatively robust, with above national average socioeconomics, driven largely by higher education, technology and health care

» Strong and focused management working on industry transition, including ensuring utility fixed cost recovery through rate structure
Credit Challenges

» While BED’s rate-setting framework is regulated by the PUC, the utility’s rate setting record reflects full cost recovery and the ability to increase rates within 45 days after filing, with later true-up

» Like most municipal electric utilities, a transition to more distributive generation such as rooftop solar, represents new challenges

» McNeil wood fueled generation facility plays a dominant role within BED’s generation mix, it has had strong operating performance and adequate fuel supply

» Customer dominance, with the University of Vermont and regional medical center representing more than 20% of BED’s FY16 revenues

Rating Outlook

The rating outlook is stable given our expectation for stability in the local economy, no changes in electric rates, and financial metrics that hold steady around current levels.

Factors that Could Lead to an Upgrade

» Longer-term trend of adjusted debt service coverage greater than 1.75x and adjusted days liquidity greater than 100 days on a sustained basis

» Given the links to the City of Burlington, continued and sustained improvement in the city’s financial position

Factors that Could Lead to a Downgrade

» Debt service coverage less than 1.50x and adjusted days liquidity less than 50 days, on a sustained basis

» Unsupportive PUC regarding cost recovery

Key Indicators

Exhibit 1

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sales (mWh)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt Outstanding ($'000)</td>
<td>63,816</td>
<td>71,720</td>
<td>76,501</td>
<td>74,721</td>
<td>74,521</td>
</tr>
<tr>
<td>Debt Ratio (%)</td>
<td>49.8</td>
<td>56.1</td>
<td>60.9</td>
<td>58.7</td>
<td>58.9</td>
</tr>
<tr>
<td>Total Days Cash on Hand (days)</td>
<td>49</td>
<td>54</td>
<td>93</td>
<td>103</td>
<td>95</td>
</tr>
<tr>
<td>Adjusted Days Liquidity on Hand (incl. Bank Lines)(days)</td>
<td>49</td>
<td>54</td>
<td>128</td>
<td>138</td>
<td>132</td>
</tr>
<tr>
<td>Adjusted Debt Service Coverage (x) (Post Transfers/PILOTs - All Debt)</td>
<td>1.41</td>
<td>1.43</td>
<td>1.70</td>
<td>1.65</td>
<td>1.62</td>
</tr>
<tr>
<td>Fixed Obligation Charge Coverage (if applicable) (x)</td>
<td>1.41</td>
<td>1.43</td>
<td>1.70</td>
<td>1.65</td>
<td>1.62</td>
</tr>
</tbody>
</table>

Source: Moody’s Investors Service

Recent Developments

*Burlington (City of) VT was upgraded to A2 in November 2017

*The McNeil plant’s FY17 capacity factor fell to 59.1% in FY 2017 from 69.4% in FY 2016.

*No additional rate adjustments are currently expected over the next two fiscal years.
Detailed Rating Considerations

Revenue Generating Base
The utility serves Burlington, the state’s largest city and economic center, with stability provided by the institutional presence of medical and higher education. BED has a monopoly in the service area, which has experienced low unemployment and rising income levels.

BED is regulated by the PUC, however Moody’s does not consider the regulatory framework imposed on BED to be the same as investor owned utility oversight. The PSB must take bond covenants into consideration, and newly filed rates may be collected 45 days after filing with the PUC, subject to later true-up. We note that this regulatory process has not produced inadequate recovery. BED also benefits from limited general fund transfers in the form of PILOTS, which amounted to 3.5% of operating revenue in FY16. BED’s two largest customers, the University of Vermont and regional medical center represent more than 20% of FY17 revenues. That said, we believe this customer dominance is largely mitigated by the essential service provided by the university and medical center. BED rates are competitive in all customer classes, with residential rates substantially below the state average. BED’s power supply mix is substantially renewable, through both owned and purchased energy resources. The McNeil plant, a wood-burning generation facility that serves as the anchor of BED’s baseload generation mix and represents slightly less than half of BED’s power supply. With a diverse and substantially renewable power supply resource mix, BED is largely insulated from many of the major industry challenges such as carbon regulation.

Operational and Financial Performance
BED has demonstrated improving financial performance over the last 3 fiscal years, with an adjusted debt service coverage ratio of 1.7x and 1.67x in FY15 and 2016 and in 1.62x in FY 2017, respectively. BED’s operating efficiencies, average weather, and renewable energy credit sales have also been positive factors that have contributed to the positive financial trend. Forecasts reflect adjusted debt service coverage continuing to improve in FY18. BED’s assumptions, which we believe to be reasonable, include no rate adjustments, average weather conditions and impacts on sales from energy efficiency programs.

LIQUIDITY
BED’s adjusted days liquidity on hand continued show strength in FY2017 at 132 days liquidity on hand. BED’s FY2015-2017 three year average adjusted days liquidity on hand was 133 days. Moody’s anticipates BED will maintain liquidity over 100 days over the next several years.

DEBT STRUCTURE
All of BED long-term debt is fixed rate. Burlington also has $46.8 million of general obligation bonds issued for electric utility purposes, which are payable from net revenues of the electric utility. The debt service on the general obligation bonds issued by Burlington is paid after the payment of debt service on the electric system revenue bonds. BED expects to spend about $10 million annually between 2018-19 on capital improvements, which includes new transmission investments. BED projects a new electric revenue bond issuance in 2017 ($7.5 million) and 2018 ($6 million) and about $3 million annually through city general obligation financings. The utility also has level debt service of roughly $7 million annually until 2024, before declining to roughly $6 million annually until 2029. In 2030, annual debt service requirements decline to $2 million until final maturity in 2035.

The city issued to a local bank a General Obligation Revenue Anticipation Note in the amount of $5 million for the support of BED which matures in 2019.

DEBT-RELATED DERIVATIVES
None

PENSIONS AND OPEB
BED participates in the Burlington Employee Retirement System, a single-employer, defined benefit retirement plan. For the year ended June 30, 2016, BED recognized pension expense of $1.5 million. BED’s allocation of the retirement system’s net pension liability stood at $12.6 million as of June 30, 2016. The financial impact of unfunded pension and OPEB obligations of BED are not currently a major factor in our assessment of its credit profile. Burlington Electric’s three-year average adjusted net pension liability was $30.8 million for 2016.
Management and Governance
The utility is governed by the mayor and 12-member city council. The mayor is elected every three years and each member of the city council has two year terms. The mayor and city council appoint 5 representatives to serve 3 year terms on the advisory board of the electric commissioners. Most operating decisions are made by BED and there is a degree of separation from the city, such as an independent auditor, limited general fund transfers in the form of PILOTS and a line of credit independent from the city. Ultimately, rate filings must be approved by the mayor and city council. Following local approval, the PUC reviews the rates, quality of services and financial management of the utility.

Legal Security
The bonds are secured by the net revenues of the electric system. There is a 1.25 times rate covenant and the debt service reserve requirement is equal to maximum annual debt service on the senior revenue bonds. The department also has approximately $46 million of general obligation (GO) bonds that are expected to be repaid from electric department net revenues. The rate covenant on the consolidated debt outstanding is 1.00 times. Per the general bond resolution, the claim on the revenues of the department by the revenue bondholders is prior to any claim of the GO bondholders.

Use of Proceeds
The 2017 Series A and B bonds are refunding bonds of a portion of outstanding debt for present value savings.

Obligor Profile
Founded in 1905, BED is Vermont’s largest municipally owned electric utility serving more than 19,600 customers. BED is the exclusive provider of electric service to the City of Burlington, an area of approximately 16 square miles, and the Burlington International Airport in South Burlington. BED is a department of the city government and is regulated by the Vermont Public Service Board.

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802-865-7415

Methodology Scorecard Factors
As indicated below, the grid indicated rating for Burlington Electric is A2, one notch above the assigned rating to the outstanding electric revenue bonds of A3. The difference primarily reflects regulation of rates by the VPUC, material links with the city, currently rated A2, and customer dominance with 2 customers representing more than 20% of BED’s FY16 revenues.

The grid is a reference tool that can be used to approximate credit profiles in the public power electric utility sector in most cases. However, the grid is a summary that does not include every rating consideration. Please see the US Public Power Electric Utilities with Generation Ownership Exposure Methodology for more information about the limitations inherent to grids.

Burlington Electric Methodology Scorecard Grid
Exhibit 2

US Public Power Electric Utilities with Generation Ownership Exposure

<table>
<thead>
<tr>
<th>Factor</th>
<th>Subfactor</th>
<th>Score</th>
<th>Metric</th>
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</thead>
<tbody>
<tr>
<td>1. Cost Recovery Framework Within Service Territory</td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>2. Willingness and Ability to Recover Costs with Sound Financial Metrics</td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>3. Generation and Power Procurement Risk Exposure</td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>4. Competitiveness</td>
<td>Rate Competitiveness</td>
<td></td>
<td>A</td>
</tr>
</tbody>
</table>

5. Financial Strength and Liquidity

<table>
<thead>
<tr>
<th>Subfactor Score Metric</th>
<th>Score</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Adjusted days liquidity on hand (3-year avg) (days)</td>
<td>A</td>
<td>133</td>
</tr>
<tr>
<td>b) Debt ratio (3-year avg) (%)</td>
<td>Aa</td>
<td>59.5%</td>
</tr>
<tr>
<td>c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)</td>
<td>A</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Preliminary Grid Indicated rating from Grid factors 1-5 | A2 |

6. Operational Considerations

7. Debt Structure and Reserves

8. Revenue Stability and Diversity

Grid Indicated Rating: A2

Source: Moody’s Investors Service

Methodology


Ratings

Exhibit 3

Burlington (City of) VT Electric Enterprise

<table>
<thead>
<tr>
<th>Issue</th>
<th>Rating Type</th>
<th>Rating Description</th>
<th>Sale Amount</th>
<th>Expected Sale Date</th>
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<tbody>
<tr>
<td>Electric System Revenue Refunding Bonds, 2017 Series A</td>
<td>Underlying LT</td>
<td>Revenue: Government Enterprise</td>
<td>$4,730,000</td>
<td>12/05/2017</td>
</tr>
<tr>
<td>Taxable Electric System Revenue Refunding Bonds, 2017 Series B</td>
<td>Underlying LT</td>
<td>Revenue: Government Enterprise</td>
<td>$5,665,000</td>
<td>12/05/2017</td>
</tr>
</tbody>
</table>

Source: Moody’s Investors Service
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