

TOWN OF BEDFORD
OPERATING POLICY MANUAL

Chapter: Finance

Issue (Effective) Date: July 1, 2017

Approval Date: June 13, 2017

Approved By: Town Council

ELECTRIC UTILITY CASH RESERVE POLICY

Section 1. PURPOSE

This policy is to document the Electric Utility Cash Reserve objectives of the Town of Bedford (“Town”). Compounded impacts of power supply cost uncertainties, a sluggish economy, volatile energy prices, and rising capital improvement costs have posed challenges to maintaining stable rates and cash reserves. The overall goal of this policy is to allow the Utility to maintain the financial flexibility to smooth rate increases and stagger rate adjustments for customers. Cash reserves quantify the amount of cash the Utility should keep in reserve to maintain a prudent level of financial resources to guard its constituents against service disruption in the event of unexpected temporary revenue shortfalls, unpredicted one-time expenditures and to provide sufficient cash flow to avoid the need for unexpected short-term borrowing. To help ensure financial stability, timely completion of capital improvements and enable the Utility to meet requirements for large unexpected expenditures, the Town shall establish a minimum Cash Reserve in accordance with industry standard best practices. The actual cash reserves may vary above the minimum and is dependent upon several risk factors for the Utility.

The minimum cash reserve guidelines established in this policy shall be set to allow reserves to fluctuate above the minimum requirements. The determination to reserve additional funds beyond the required minimum shall be based on the assessments of uncertainties and other financial policies such as:

- The financial risk facing the Utility.
- The Utility’s rate setting policies.
- The variability in power costs.
- The Town’s Debt policies.
- The future capital improvements that will be needed by Utility.
- The Utility’s Line Extension policies.

Section 2. POLICY & METHODOLOGY

The methodology used in this policy is based on certain assumptions related to percent of operation and maintenance, purchase power, historical investment in assets, debt service and the five (5) year capital improvement plan. The establishment of minimum cash reserves shall consider the following factors:

A. Operations and Maintenance Risk

Working Capital Lag - Timing differences exist between when expenses are incurred and revenues received from customers. Establishing a minimum cash reserve helps ensure cash exists to pay expenses in a timely manner.

- **This Cash Reserve Policy will include 12.3% of annual operating expenses excluding depreciation expense and power supply expenditures.**

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- **12.3% was derived by assuming a 45 day lag between billing and payment receipt from customers. (45 days/365 days)**

B. Power Supply Risk

Max Month – The peak month power supply cost was used for the minimum cash policy. This represents 9.3% of the total yearly power supply.

- **This recommended cash reserve policy will include 9.3% (or the percentage of the Peak Month) of annual power supply. (Reference Table 1)**

Table 1 - FY 2016 Annual Power Supply

Date	Monthly Cost
July 2015	\$ 1,208,619
August 2015	\$ 1,250,521
September 2015	\$ 1,208,282
October 2015	\$ 1,070,940
November 2015	\$ 1,087,014
December 2015	\$ 1,134,011
January 2016	\$ 1,339,658
February 2016	\$ 1,339,857
March 2016	\$ 1,228,862
April 2016	\$ 1,099,777
May 2016	\$ 1,120,931
June 2016	\$ 1,260,842
Total	\$ 14,349,314
Percentage of total	9.3%

C. Historical Investment Risk

Investment in assets – Catastrophic events may occur that require substantial investments to replace damaged assets. Some examples of catastrophic events include ice storms, earthquakes, wind storms, floods, or tornadoes. Many of these catastrophic events may allow the Utility to recover the cost of damages from FEMA; however FEMA reimbursements can take between 6 months to 2 years to recover. The Utility should ensure adequate cash reserves exist to replace the assets in a timely fashion and to arrange short term financing options. The minimum reserve levels are often combined with emergency funding from banks or bonding agencies. The percent to the minimum cash reserves are dependent on the age of the assets in service and the level of risk of catastrophic type events.

- **The typical range under this category is 1.0% – 3.0%. This recommended cash reserve policy will include 2.0% of the historical investment in assets as recorded in the financial statements. (Reference Table 2)**
- **The Town of Bedford is depreciated at 54.7%. (Reference Table 3)**

Table 2 - Risk vs Percent Depreciated		
Depreciation Percent	0 - 49%	1.0%
Depreciation Percent	50 - 55%	2.0%
Depreciation Percent	Over 55%	3.0%

Table 3 - Electric Utility Fixed Assets Per FY 2016 CAFR	
Historical Investment	\$ 34,339,481
Accumulated Depreciation	\$ 18,796,533
Percent Depreciated	54.7%
Risk Associated with Historical Assets	2.0%

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D. Debt Service Risk

Annual Debt Service – Some debt service payments do not occur evenly throughout the year and often occur every six months. The Utility has to ensure adequate cash reserves exist to fund the debt service payment when the payment is due.

- **This Cash Reserve Policy will include 100.0% of the current portion of Debt Service. (Reference Table 4)**

Table 4 - FY 2018 Annual Debt Service			
Payment Date	Principal	Interest	Total
Various	\$ 1,329,026	\$ 281,182	\$ 1,610,208
	<i>Highest Payment Risk</i>		\$ 1,610,208
	<i>Percent of Annual Total</i>		100.0%
FY 2018 Debt Payment Schedule			
1996 Taxable EL Lease - Semi Annual			\$ 226,097
2008 Series Electric - Annual			\$ 274,681
2016 AMP BAN Refunding - Monthly			\$ 1,109,430
		TOTAL	\$ 1,610,208

- The Town of Bedford currently pays some debt payments with monthly transfers, some semi-annually and some annually. Town Council shall reserve funds to satisfy the maximum payment for the year or 100.0% of the annual debt payment.

E. Five-Year Capital Plan Risk

Capital Improvement Program – Some capital improvements are funded through bond issuances and some through cash reserves. The establishment of this minimum cash reserve level will help to ensure the timely replacement or construction of assets.

- **This recommended Cash Reserve Policy will include 20.0% of the total five (5) year Capital Improvement Program less any improvements funded through the issuance of bonds. (Reference Table 5)**

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Table 5 - Capital Improvement Program						
	Adopted 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	20% Average
Capital Improvements	\$ 2,079,500	\$ 1,621,830	\$ 530,000	\$ 665,000	\$ 750,000	\$ 1,129,266
Bond Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Difference	\$ 2,079,500	\$ 1,621,830	\$ 530,000	\$ 665,000	\$ 750,000	\$ 1,129,266

- F. The minimum cash reserve calculation considers the risk “in total” and not each individual category. For example; catastrophic events can occur and the amount may far exceed the amount set aside under “historical investment in assets”.
- G. If certain events occur that results in cash reserves falling below the minimum cash reserve levels, Town Council shall take action to restore cash reserves to the minimum levels over the subsequent three (3) years. These actions may include a number of options:
1. Rate Adjustments
 2. Cost reductions
 3. Issuance of bonds to fund capital improvement programs
 4. Modification of the assumptions used to determine the cash reserve levels
- H. In accordance with the FY 2016 Comprehensive Annual Financial Report (CAFR) findings, the FY 2017 minimum cash reserve shall be \$5,158,030. (Reference Table 6)

Table 6 - Minimum Utility Cash Reserves	Pecent Allocated	FY 2017 Reserves
O&M (Less Depreciation Expense & Purchased Power)	12.3%	\$ 391,910
Purchase Power	9.3%	\$ 1,339,857
Historical Rate Base	2.0%	\$ 686,790
Current Portion of Debt Service	100.0%	\$ 1,610,208
Five-Year Capital Plan - Net of Bond Proceeds	20.0%	\$ 1,129,266
Cash Reserves		\$ 5,158,030

- I. To determine the number of working capital days, divide the cash reserves by the audited Operating and Maintenance (O&M) expenses (excluding depreciation) which equates to providing 100 days. (Reference Table 7)

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Table 7 - Overall Policy Working Capital Days/O&M Expenses	
Expenses	\$ 18,760,558
Minimum Cash Reserves	\$ 5,158,030
Expenses/Minimum Cash Reserves	3.64
Days In Year	365
Days Working Capital	100

- J. This recommended Cash Reserve Policy shall ensure that there is minimum cash on hand of between 90 and 120 days in the event of a system disruption. Actual cash reserves may vary substantially above the minimum and is dependent on the life cycle of assets, future capital plan, rate setting policies, and debt policies.
- K. The cash reserve calculation shall be updated annually after completion of the Comprehensive Annual Financial Report (CAFR) by the Town's independent auditors. The adequacy of the guidelines shall be reviewed, and if appropriate, revised guidelines may be recommended.

Section 3. OBJECTIVES

- A. The primary objectives of the Electric Utility Fund Reserves Policy, listed in priority order, shall be as follows:
 - 1. **Maintain appropriate cash reserves to ensure:**
 - a. Cash exists for timely payment of bills.
 - b. The short-term and long-term financial health of the Utility.
 - c. Stable rates for customers.
 - d. Cash exists to fund unanticipated cost contingencies.
 - e. The amount and timing of future bond issues are identified.
 - f. A significant requirement is being met for bond rating agencies in determining the Utility's credit score.
 - 2. **Reserve for cash flow:** This reserve addresses liquidity. A reserve for cash flow is needed to address the imbalance of monthly income compared to monthly expenditures in the event that expenditures exceed income.
 - 3. **Reserve for emergencies:** This reserve addresses emergency or disaster in which there is extreme peril to the safety of person and property within the Electric Utility coverage area caused by such conditions as air pollution, fire, flood, storm, epidemic, riot, earthquake or other conditions as set forth by Town Council.
 - 4. **Reserve for economic stabilization:** This reserve addresses the stabilization of the delivery of Electric Utility services during periods of operation budget deficits resulting in conditions such as drastic and unanticipated economic downturns or unanticipated spikes in operating costs.

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Section 4. PROCEDURES

- A. Town Council:
 - 1. Approve Electric Utility Cash Reserve Policy.
 - 2. Approve the use of any reserves.

- B. Town Manager:
 - 1. Update the calculations in the Cash Reserve Policy after every finalized CAFR.
 - 2. Ensure the Town is in compliance with the cash reserves amount stated in the policy.
 - 3. Recommend use of any reserves.
 - 4. Report results from use of any reserves.

Section 5. REVISIONS

- A. This policy was approved and adopted by the Town Council on May 24, 2016.
- B. This policy was revised and adopted by the Town Council on June 13, 2017.

Revisions

Original-May, 2016

Revised-June, 2017