

# **MANAGEMENT AND OPERATIONS AUDIT**

**CITIZENS' ELECTRIC COMPANY OF LEWISBURG**

**WELLSBORO ELECTRIC COMPANY**

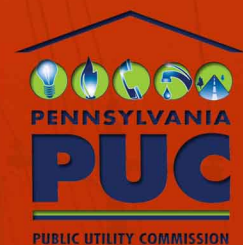
**VALLEY ENERGY, INC.**

**(COLLECTIVELY REFERRED TO AS THE C&T COMPANIES)**

**Prepared by the  
Pennsylvania Public Utility Commission  
Bureau of Audits**

**Issued November 2019**

**Docket Nos. D-2019-3007883, D-2019-3007884, &  
D-2019-3007885**



**CITIZENS' ELECTRIC COMPANY OF LEWISBURG,  
WELLSBORO ELECTRIC COMPANY  
VALLEY ENERGY, INC.  
MANAGEMENT AND OPERATIONS AUDIT**

**TABLE OF CONTENTS**

<b><u>Chapter</u></b>		<b><u>Page</u></b>
I.	INTRODUCTION	1
	A. Objectives and Scope	1
	B. Audit Approach	2
	C. Functional Area Ratings	3
	D. Benefits	3
	E. Recommendation Summary	5
II.	BACKGROUND	7
III.	EXECUTIVE MANAGEMENT AND ORGANIZATIONAL STRUCTURE	12
IV.	CORPORATE GOVERNANCE	17
V.	AFFILIATED INTERESTS AND COST ALLOCATIONS	20
VI.	FINANCIAL MANAGEMENT	23
VII.	ELECTRIC OPERATIONS	28
VIII.	GAS OPERATIONS	36
IX.	CUSTOMER SERVICE	40
X.	EMERGENCY PREPAREDNESS	44
XI.	HUMAN RESOURCES	47
XII.	ACKNOWLEDGEMENTS	51
XIII.	APPENDICES	52
	A. Citizens' Electric Company of Lewisburg Financial and Operating Data and Statistics	
	B. Citizens' Electric Company of Lewisburg Balance Sheet	
	C. Wellsboro Electric Company Financial and Operating Data and Statistics	
	D. Wellsboro Electric Company Balance Sheet	
	E. Valley Energy, Inc. Financial and Operating Data and Statistics	

**CITIZENS' ELECTRIC COMPANY OF LEWISBURG,  
WELLSBORO ELECTRIC COMPANY  
VALLEY ENERGY, INC.  
MANAGEMENT AND OPERATIONS AUDIT**

**LIST OF EXHIBITS**

<b><u>Exhibit</u></b>	<b><u>Page</u></b>
I-1 Functional Rating Summary	4
1-2 Summary of Recommendations	6
II-1 C&T Enterprises, Inc. Corporate Entity Chart as of July 2019	7
II-2 Service Territories of Tri-County Rural Electric Cooperative, Inc; Claverack Rural Electric Cooperative, Inc.; Citizens' Electric Company of Lewisburg; Wellsboro Electric Company; and Valley Energy, Inc. as of July 2019	9
II-3 Tri-County Rural Electric Cooperative, Inc; Claverack Rural Electric Cooperative, Inc.; Citizens' Electric Company; Wellsboro Electric Company; Valley Energy, Inc. Company Details as of July 2019	10
II-4 Citizens' Electric Company of Lewisburg Customer Base Statistics As of December 31, 2018	11
II-5 Wellsboro Electric Company Customer Base Statistics as of December 31, 2018	11
II-6 Valley Energy, Inc. Customer Base Statistics as of December 31, 2018	11
III-1 C&T Enterprises, Inc. Organization Chart as of July 2019	12
III-2 Citizens' Electric Company of Lewisburg Organization Chart as of July 2019	14
III-3 Wellsboro Electric Company Organization Chart as of July 2019	14
III-4 Valley Energy, Inc. Organization Chart as of July 2019	15
V-1 C&T Enterprises, Inc. Summary of Shared Services Charges For the Year Ended December 31, 2018	22
VI-1 Citizens' Electric Company of Lewisburg Financial Management Organizational Structure as of July 2019	23

**CITIZENS' ELECTRIC COMPANY OF LEWISBURG,  
WELLSBORO ELECTRIC COMPANY  
VALLEY ENERGY, INC  
MANAGEMENT AND OPERATIONS AUDIT**

**LIST OF EXHIBITS**

<b><u>Exhibit</u></b>	<b><u>Page</u></b>
VI-2 Wellsboro Electric Company Financial Management Organizational Structure as of July 2019	24
VI-3 Valley Energy, Inc Financial Management Organizational Structure As of July 2019	24
VI-4 C&T Companies Summary of Capital Structure for the Years Ended December 31, 2016 – 2018	26
VI-5 C&T Companies Dividend Payout Ratio for the Years 2014 – 2018	27
VII-1 Citizens' Electric Company of Lewisburg and Wellsboro Electric Company Service Territory Overview as of December 31, 2018	28
VII-2 Citizens' Electric Company of Lewisburg Electric Operations Organizational Charts as of March 2019	29
VII-3 Wellsboro Electric Company of Lewisburg Electric Operations Organizational Charts as of March 2019	30
VII-4 Citizens' Electric Company of Lewisburg and Wellsboro Electric Company Electric Reliability Performance for the Years 2016 through 2018 and 2nd Quarter 2019	32
VII-5 Citizens' Electric Company of Lewisburg Storm Outage Statistics For the Years 2016 through 2018	32
VII-6 Wellsboro Electric Company Unknown Outage Statistics for the Years 2015 through 2018 and 2nd Quarter 2019	34
VIII-1 Valley Energy, Inc. Gas Operations Department as of July 2019	36
VIII-2 Valley Energy, Inc. Field Operations Overtime Levels by Percent of Straight Time Hours 2014 to February 2019	37
VIII-3 Valley Energy, Inc. Emergency Response Statistics 2014 to February 2019	37
VIII-4 Valley Energy, Inc. Leak History by Class 2014 to Feb 2019	38

**CITIZENS' ELECTRIC COMPANY OF LEWISBURG,  
WELLSBORO ELECTRIC COMPANY  
VALLEY ENERGY, INC  
MANAGEMENT AND OPERATIONS AUDIT**

**LIST OF EXHIBITS**

<b><u>Exhibit</u></b>		<b><u>Page</u></b>
VIII-5	Valley Energy, Inc. Third-Party Line Hits Causal Analysis 2014 to February 2019	38
IX-1	C&T Companies Representative Organizational Structure for Customer Service as of March 2019	41
IX-2	C&T Companies Total Bills Rendered vs. Adjusted Bills for the Years 2015 through 2018	42
IX-3	C&T Companies Average Monthly Customer Arrearages For the Years 2015 through 2018	43
X-1	Pennsylvania Public Utility Commission Public Utility Security Planning and Readiness Self Certification Form	44
X-2	C&T Enterprises, Inc. Information Technology Department	46
XI-1	C&T Enterprises, Inc. Human Resources Organization Chart As of July 2019	47
XI-2	C&T Enterprises, Inc. Safety and Compliance Organization Chart As of July 2019	49
XI-3	Citizens' Electric Company of Lewisburg, Valley Energy, Inc., Wellsboro Electric Company OSHA Reportable and Lost Time / Days Away and Restricted Rates as of March 2019	49

## I. INTRODUCTION

Management audits are engagements that determine the extent to which a utility has contained costs; developed reasonable long-range and short-range plans for its continued operation and maintenance; provided proper service to customers; and provided proper management and organizational structure. These audits come under the Commission's general administrative power and authority to supervise and regulate all public utilities in the Commonwealth, 66 Pa. C.S. § 501(b). More specifically, the Commission can investigate and examine the condition and management of any public utility, 66 Pa. C.S. § 331(a). Management and operational audits are required of fixed utilities whose plant-in-service is valued at not less than \$10 million pursuant to 66 Pa. C.S. § 516(a). These management and operational audits are to be conducted at least once every five to eight years.

As such, the Pennsylvania Public Utility Commission (PUC or Commission) conducted its regularly scheduled management and operations audit of Citizens' Electric Company of Lewisburg (Citizens'), Wellsboro Electric Company (Wellsboro), and Valley Energy, Inc. (Valley) (collectively referred to as the C&T companies). Each of the C&T companies are 100% owned by C&T Enterprises, Inc. (C&T) which, in turn, is 50% owned by Claverack Rural Electric Cooperative (Claverack) and 50% owned by Tri-County Rural Electric Cooperative (Tri-County). As the C&T companies are each owned by C&T, the management and operational reviews were conducted concurrently.

This report summarizes the work of the Commission's Management Audit team and outlines their conclusions. The findings presented in the report identify certain areas and aspects where weaknesses or deficiencies exist. In all cases, recommendations are offered to improve, correct, or eliminate these conditions. The final and most important step in the management audit process is to initiate actions toward implementation of the recommendations.

### A. Objectives and Scope

The objectives of this management and operations audit were:

- To provide the Commission, the C&T companies, and the public with an assessment of the efficiency and effectiveness of the C&T companies' operations, management methods, organization, practices, and procedures;
- To identify opportunities for improvement and develop recommendations to address those opportunities; and,
- To provide an information base for future regulatory and other inquiries into the management and operations of the C&T companies.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

The scope of this audit was limited to selected areas of the C&T Companies, as explained in Section B, Audit Approach.

**B. Audit Approach**

The management and operations audit was performed by the internal staff of the Management Audit Division of the PUC's Bureau of Audits (auditors). The process began with a pre-fieldwork analysis as outlined below:

- Prior management and operations audits, follow-up management efficiency investigations, implementation plans, implementation plan progress reports, other Commission conducted audits, annual diversity reports, and other available documents were reviewed.
- Input was solicited from Commission Bureaus and Offices, certain external parties, and the C&T companies, regarding any concerns or issues they would like addressed during our review.
- A five-year internal trend (2014 – 2018) and ratio analysis was completed using financial and operational data obtained from the C&T companies, Commission, and other available sources.

This information was used to determine the scope of the audit. Specifically, the following areas or functions were selected for an in-depth analysis and are included in this report:

- Executive Management and Organizational Structure
- Corporate Governance
- Affiliated Relationships and Cost Allocations
- Financial Management
- Electric Operations
- Gas Operations
- Customer Service
- Emergency Preparedness
- Human Resources

The pre-fieldwork analysis should not be construed as a comprehensive evaluation of the management or operations in the functional areas not selected for in-depth examination. If we conducted a thorough review of those areas, weaknesses or deficiencies may have come to our attention that was not identified in the limited pre-fieldwork review.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

The fieldwork began on March 19, 2019 and continued intermittently through July 18, 2019. Our primary audit procedures included:

- Interviews with C&T companies and personnel as well as other Commission Bureaus.
- Analysis of records, documents, and reports of a financial and operational nature. This analysis focused primarily on the period 2014-2018, and year-to-date 2019, as available.
- Site visits to the Citizens', Wellsboro, and Valley offices and direct observation of work practices.

**C. Functional Area Ratings**

For the functions or areas of the C&T companies that were selected for in-depth examination, the auditors rated performance relative to the expected level at the time of the audit. This expected performance level is the state at which each area or function should be operating given the C&T companies resources and general operating environment. Expected performance is not a "cutting edge" operating condition; rather, it is management of an area or function such that it produces reasonably expected operating results.

The following are the evaluative categories utilized to rate each function or area's operating or performance level:

- Meets Expected Performance Level
- Minor Improvement Necessary
- Moderate Improvement Necessary
- Significant Improvement Necessary
- Major Improvement Necessary

Our ratings for each function or area can be found in Exhibit I-1 on the next page.

**D. Benefits**

Our standard procedure is to quantify potential savings expected from implementing the recommendations made in our reports. However, for this audit, it was not possible. The anticipated benefits are of a qualitative nature and/or there was insufficient data available to quantify for the effect. For example, it is difficult to estimate the actual benefit where new management practices or procedures are recommended, especially if such procedures and practices did not previously exist or were not fully functional. Similarly, changes in workflow or implementation of good business practices could result in improved effectiveness and efficiency of a specific function but cannot be easily quantified.



**Exhibit I – 1**  
**Citizens’ Electric Company of Lewisburg**  
**Wellsboro Electric Company**  
**Valley Energy, Inc.**  
**Management and Operations Audit**  
**Functional Rating Summary**

Functional Area	Meets Expected Performance Level	Minor Improvement Necessary	Moderate Improvement Necessary	Significant Improvement Necessary	Major Improvement Necessary
<b>Citizens’ Electric Company of Lewisburg</b>					
Executive Management and Organizational Structure	X				
Corporate Governance	X				
Affiliated Interests and Cost Allocations	X				
Financial Management	X				
Electric Operations	X				
Customer Service	X				
Emergency Preparedness			X		
Human Resources	X				
<b>Wellsboro Electric Company</b>					
Executive Management and Organizational Structure		X			
Corporate Governance	X				
Affiliated Interests and Cost Allocations	X				
Financial Management	X				
Electric Operations		X			
Customer Service	X				
Emergency Preparedness			X		
Human Resources		X			
<b>Valley Energy, Inc.</b>					
Executive Management and Organizational Structure		X			
Corporate Governance	X				
Affiliated Interests and Cost Allocations	X				
Financial Management	X				
Gas Operations	X				
Customer Service	X				
Emergency Preparedness			X		
Human Resources	X				

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

The C&T companies will have options to implement the recommendations and as a result the auditors have not estimated the cost of implementation for recommendations where no savings were quantified. However, it should be noted that the cost of implementing certain recommendations could be significant.

**E. Recommendation Summary**

Chapters III through XI detail the findings, conclusions and recommendations for each function or area reviewed in-depth during this audit. Exhibit I-2 summarizes the recommendations with the following priority assessments for implementation:

- **INITIATION TIME FRAME** – Estimated time frame on how quickly the C&T companies should be able to initiate its implementation efforts, given the C&T companies resources and general operating environment. The time necessary to complete implementation will vary depending on the nature of the recommendation, the scope of the efforts necessary, and resources available to implement the recommendation.
  
- **BENEFITS** – Net quantifiable benefits have been provided, where they could be estimated, as discussed in Section D - Benefits. Our estimated overall level of benefits rankings is not solely based on quantifiable dollars, but the auditor's assessment of the potential overall impact of the recommendation on the efficiency and/or effectiveness of DLC, and/or the services it provides.
  - **HIGH BENEFITS** – Implementation of the recommendation would result in major service improvements, substantial improvements in management practices and performance, and/or significant cost savings.
  
  - **MEDIUM BENEFITS** – Implementation of the recommendation would result in important service improvements, meaningful improvements in management practices and performance, and/or meaningful cost savings.
  
  - **LOW BENEFITS** – Implementation of the recommendation is likely to result in service improvements, improvements in management practices and performance, and/or enhance cost control.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

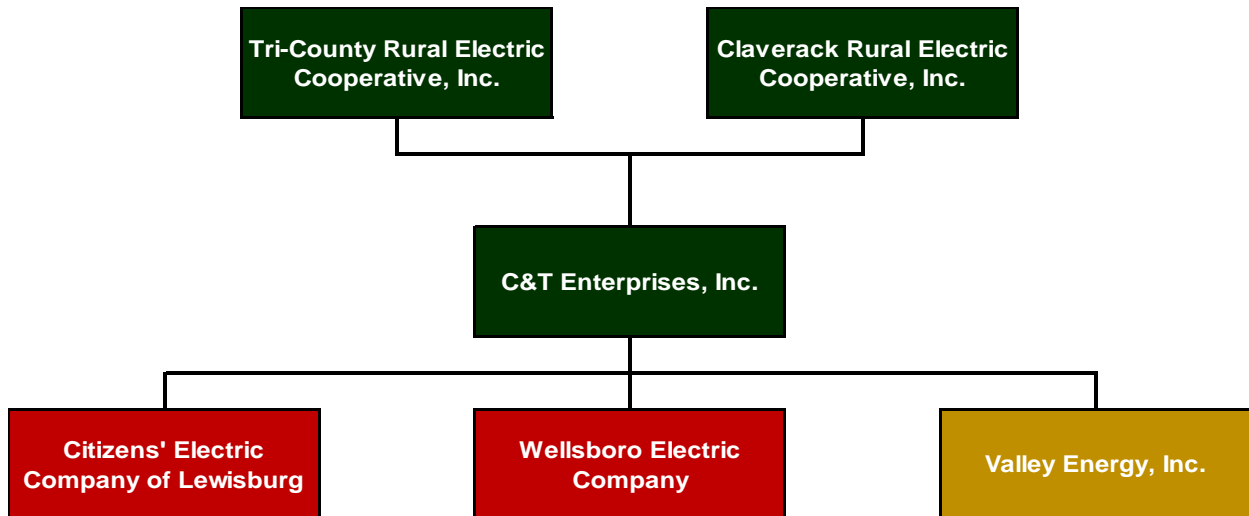
**Exhibit I – 2**  
**Citizens' Electric Company of Lewisburg**  
**Wellsboro Electric Company**  
**Valley Energy, Inc.**  
**Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)
<b>Chapter III – Executive Management</b>				
III-1	Execute the proposed plan to assign the Wellsboro CEO position to a qualified individual able to devote the necessary time to provide adequate leadership to Wellsboro by year end 2019.	17	0-6 Months	Low
III-2	Review all schedules in Valley Energy's Annual Report to the PUC for accurate reporting and determine and correct any sources of errors.	17	0-6 Months	Low
<b>Chapter IV – Corporate Governance</b>				
None				
<b>Chapter V – Affiliated Relationships and Cost Allocations</b>				
None				
<b>Chapter VI – Financial Management</b>				
None				
<b>Chapter VII – Electric Operations</b>				
VII-1	Reduce the number of unknown outages at Wellsboro by providing additional resources to assist in investigating unknown outages and/or through supplemental training for field operations employees.	36	0-6 Months	Low
<b>Chapter VIII – Gas Operations</b>				
None				
<b>Chapter IX – Customer Service</b>				
None				
<b>Chapter X – Emergency Preparedness</b>				
X-1	Develop a business case to assess the options to create a C&T position to oversee the cybersecurity function for the C&T Companies.	48	6-12 Months	Medium
<b>Chapter XI – Human Resources</b>				
XI-1	Establish minority employee and MWDBE vendor utilization goals and submit annual diversity reports to the PUC for Wellsboro Electric Company.	52	0-6 Months	Low

## II. BACKGROUND

Citizens' Electric Company of Lewisburg (Citizens'), Wellsboro Electric Company (Wellsboro), and Valley Energy, Inc. (Valley) (collectively referred to as the C&T companies) are public utilities subject to regulation by the Pennsylvania Public Utility Commission (PUC or Commission). All three companies are 100% owned by C&T Enterprises, Inc. (C&T). C&T is a for-profit subsidiary of two rural electric cooperatives<sup>1</sup> with each having 50% ownership; Claverack Rural Electric Cooperative, Inc. (Claverack) and Tri-County Rural Electric Cooperative, Inc. (Tri-County). C&T's corporate entity chart is displayed in Exhibit II-1. This chart displays the dual rural electric cooperative ownership of C&T which in turn owns the three regulated subsidiaries, Citizens', Wellsboro, and Valley.

**Exhibit II – 1  
C&T Enterprises, Inc.  
Corporate Entity Chart  
As of July 2019**



Source: Data Request EM-1

<sup>1</sup> An electric cooperative is a consumer-owned and controlled non-profit utility which provides electricity and associated services at cost to its consumer-members. Rural electrification was initially made possible by the Rural Electrification Administration, which was created by Executive Order of President Franklin Delano Roosevelt on May 11, 1935, and later by enactment of the Rural Electrification Act of 1936 on May 20, 1936. Cooperatives brought electricity to rural areas that the investor-owned utilities did not serve.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

C&T's unique corporate ownership structure is due to the following historic series of events:

- Tri-County decided it would be prudent to purchase Wellsboro. Wellsboro's service territory is an enclave to Tri-County's territory (see Exhibit II-2), and it would have been an advantageous purchase both in terms of customer base and geographic convenience. However, Wellsboro's system could not be directly incorporated into Tri-County's system, because Wellsboro serves an incorporated area with more than 2,500 residents and its service territory did not meet the definition of "rural area" as defined in 15 Pa.C.S. § 7303. In March 1994, Tri-County formed Wilderness Area Utilities, Inc. (Wilderness) to facilitate the purchase of Wellsboro.
- In January 1995, Wilderness completed the purchase of Wellsboro.
- Tri-County decided to acquire Citizens'. Tri-County asked Claverack to invest in Citizens' as well to increase overall equity involved because significant investment was being placed into Wellsboro's system at this time.
- In July 1998, Claverack and Tri-County formed C&T to purchase Citizens' with each cooperative retaining 50% stock ownership of C&T.
- In February 1999, C&T purchased the majority of Citizens' stock.
- C&T decided to make an additional purchase to benefit from economies of scale. It was decided that C&T would buy what is now Valley from the NUI Corporation (NUI) via an asset purchase.
- In October 2000, Valley was formed to facilitate the purchase of the Pennsylvania and New York natural gas assets from NUI.
- In November 2002, the transfer of assets from NUI to Valley was completed.
- In January 2005, Tri-County transferred 100% ownership of its common stock of Wilderness to C&T. Wilderness then transferred 100% of its stock in Wellsboro to C&T and Wilderness was deactivated. At this point, C&T owned 100% of Wellsboro.
- Present day, the five distribution companies (two non-regulated owners and the C&T Companies) utilize C&T for shared services including information technology, finance, human resources, payroll, communications, media relations, and for an after-hours call center.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

The current geographic footprint of the five distribution companies is displayed in Exhibit II-2. General company statistics of the non-regulated owners and the C&T Companies are shown in Exhibit II-3. Statistics specific to each of the C&T Companies are displayed in Exhibits II-4 through II-6.

### Exhibit II – 2 Company Service Territories as of July 2019



Source: C&T Enterprises, Inc. Company Website, July 2019

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit II – 3**  
**Company Details as of July 2019**

Company Name	Company Description	Headquarters	Distribution Miles	Number of Customers
Claverack	Consumer owned non-profit electric distribution company cooperative	Wysox, PA	2,760	18,600
Tri-County	Consumer owned non-profit electric distribution company cooperative	Mansfield, PA	3,270	19,100
C&T	Management and support services	Lewisburg, PA	-	-
Citizens'	For profit investor-owned electric distribution utility	Lewisburg, PA	255	6,900
Wellsboro	For profit investor-owned electric distribution utility	Wellsboro, PA	525	6,200
Valley	For profit investor-owned natural gas distribution utility	Sayre, PA	175	8,600

Source: C&T Enterprises, Inc. Company Website, July 2019

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit II – 4**  
**Citizens' Electric Company of Lewisburg**  
**Customer Base Statistics**  
**As of December 31, 2018**

Customer Class	No. Of Customers	% of Customers	KWH Sold	% of KWH Sold	Sales Revenue (\$)	% of Revenue
Residential	5,883	83.6%	90,568,089	50.9%	9,187,689	65.7%
Commercial	1,101	15.7%	31,359,169	17.6%	2,759,807	19.8%
Industrial	37	0.5%	55,546,480	31.2%	1,901,115	13.6%
Public	12	0.2%	533,386	0.3%	126,984	0.9%
<b>Total</b>	<b>7,033</b>	<b>100.0%</b>	<b>178,007,124</b>	<b>100.0%</b>	<b>13,975,595</b>	<b>100.0%</b>

Source: 2018 Citizens' Electric Company PUC Annual Report Schedule 600 and Auditor Analysis

**Exhibit II – 5**  
**Wellsboro Electric Company**  
**Customer Base Statistics**  
**As of December 31, 2018**

Customer Class	No. Of Customers	% of Customers	KWH Sold	% of KWH Sold	Sales Revenue (\$)	% of Revenue
Residential	5,124	80.8%	44,774,810	42.2%	6,255,693	55.1%
Commercial	1,202	19.0%	32,919,804	31.0%	3,718,004	32.8%
Industrial	12	0.2%	28,120,464	26.5%	1,331,037	11.7%
Public	1	>0.1%	238,060	0.2%	40,603	0.4%
<b>Total</b>	<b>6,339</b>	<b>100.0%</b>	<b>106,053,138</b>	<b>100.0%</b>	<b>11,345,337</b>	<b>100.0%</b>

Source: 2018 Wellsboro Electric Company PUC Annual Report Schedule 600 and Auditor Analysis

**Exhibit II – 6**  
**Valley Energy, Inc.**  
**Customer Base Statistics**  
**As of December 31, 2018**

Customer Class	No. Of Customers	% of Customers	MCF Sold	% of MCF Sold	Sales Revenue (\$)	% of Revenue
Residential	6,148	87.3%	604,641	1.6%	4,634,029	48.2%
Commercial	864	12.3%	363,174	1.0%	1,956,416	20.4%
Industrial	27	0.4%	35,813,990	97.4%	3,017,715	31.4%
<b>Total</b>	<b>7,039</b>	<b>100.0%</b>	<b>36,781,805</b>	<b>100.0%</b>	<b>9,608,160</b>	<b>100.0%</b>

Source: 2018 PUC Annual Report Schedule 600 and Auditor Analysis



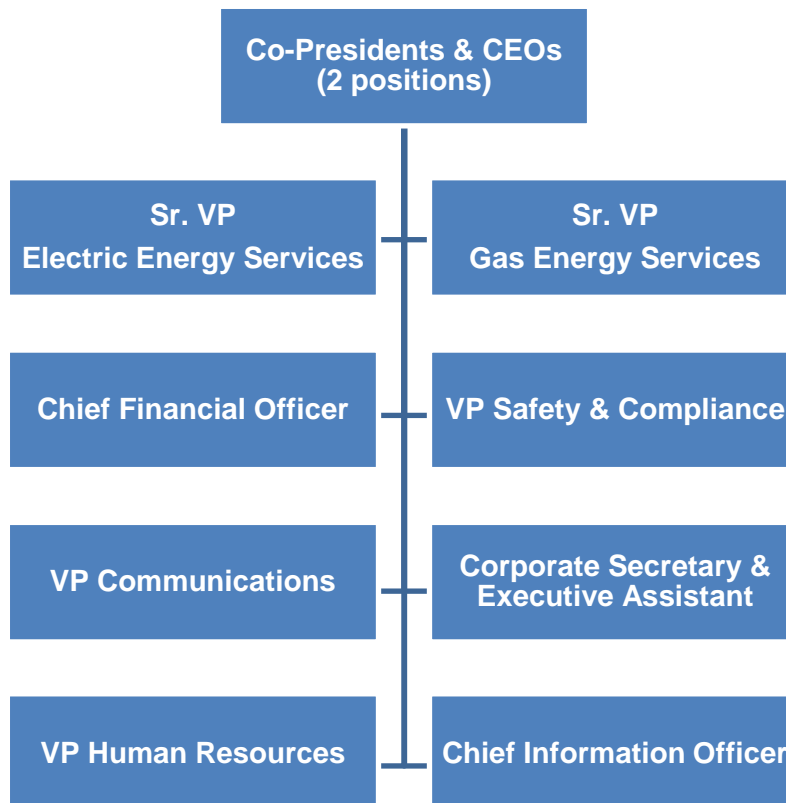
### III. EXECUTIVE MANAGEMENT

#### Background

As stated in Chapter II – Background, Citizens' Electric Company of Lewisburg (Citizens'), Wellsboro Electric Company (Wellsboro), and Valley Energy, Inc. (Valley) (collectively referred to as the C&T Companies) are public utilities subject to regulation by the Pennsylvania Public Utility Commission (PUC or Commission). All three companies are 100% owned by C&T Enterprises, Inc. (C&T). C&T is a for-profit subsidiary of two rural non-profit electric cooperatives which each having 50% ownership; Claverack Rural Electric Cooperative, Inc. (Claverack) and Tri-County Rural Electric Cooperative, Inc. (Tri-County).

C&T has a ten-member Board of Directors (Board) that is discussed in more detail in Chapter IV – Corporate Governance. C&T is directed by two Co-Presidents and Chief Executive Officers (CEOs) who also each serve as the President and CEO of one of the owners (Claverack and Tri-County, respectively). The C&T organization chart is displayed in Exhibit III-1.

**Exhibit III – 1  
C&T Enterprises, Inc.  
Organization Chart  
As of July 2019**



Source: Data Request EM-3

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

C&T provides shared services for the five distribution companies including information technology, finance, human resources, payroll, communications, media relations, and for an after-hours call center. The duties and responsibilities of C&T's officers for these subjects are discussed in greater detail in other chapters of the audit report. Specifically, information technology is discussed in Chapter X – Emergency Preparedness; finance is discussed in Chapter VI – Financial Management; human resources, payroll, communications, and media relations is discussed in Chapter XI – Human Resources; and the after-hours call center is discussed in Chapter IX – Customer Service. Each distribution company utilizes C&T for the shared services only. C&T's Board does not have any influence on the respective decisions that are made by each distribution company's Board.

All non-union employees (even those with exclusive responsibilities to one of the three C&T Companies) are considered C&T employees. The organization structure for each of the C&T companies are displayed in Exhibits III-2 through III-4. There are several positions for the C&T organization shown in Exhibit III-1 that have multiple responsibilities across companies. These positions are as follows:

- Co-President and CEO "1" – Has additional duties as the President and CEO of Claverack.
- Co-President and CEO "2" – Has additional duties as the President and CEO of Tri-County and the President and CEO of Wellsboro.
- Senior VP of Electric Energy Services – Has additional duties as President and CEO of Citizens'.
- Senior VP of Gas Energy Services – Has additional duties as President and CEO of Valley.

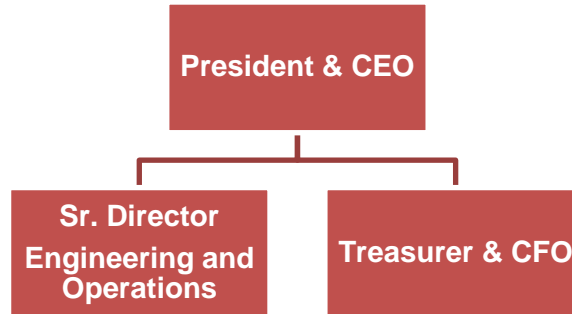
Citizens' has a nine-member Board discussed in more detail in Chapter IV – Corporate Governance. The Citizens' organization chart is displayed in Exhibit III-2. Citizens' is directed by its President and CEO with two direct reports: the Senior Director of Engineering and Operations, and the Treasurer and CFO. In 2019, current priority capital projects include a focus on improved reliability and switching capabilities, replacement of vintage underground cable, and the replacement of first-generation advanced metering infrastructure (AMI) meters with more advanced models.

Wellsboro has a nine-member Board discussed in more detail in Chapter IV – Corporate Governance. The Wellsboro organization chart is displayed in Exhibit III-3. Wellsboro is directed by its President and CEO with a Treasurer and Vice President of Finance and Administration and a Vice President of Engineering and Operations/Chief Operating Officer reporting to the President. Wellsboro is the only C&T company with union positions. These positions report to the Vice President of Engineering/Chief Operations Officer and are further detailed in Chapter VII – Electric Operations. In 2019, current priority capital projects include SCADA upgrades, a transmission project in conjunction with a feed from Pennsylvania Electric Company, and substation

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

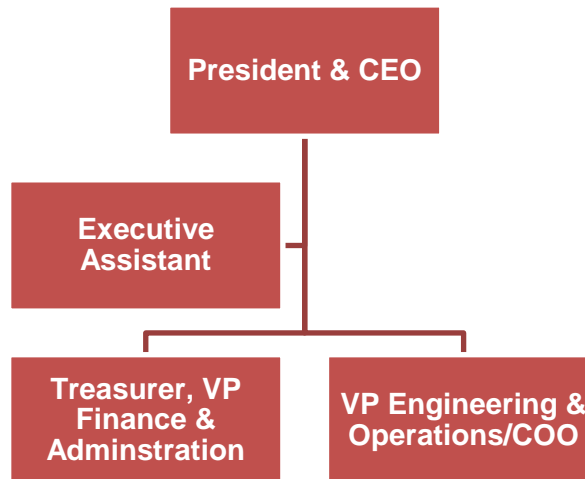
upgrades. As of July 2019, Wellsboro's President and CEO also serves as the President and CEO of Tri-County and the President and CEO of C&T.

**Exhibit III – 2**  
**Citizens' Electric Company of Lewisburg**  
**Organization Chart**  
**As of July 2019**



Source: Data Request EM-3

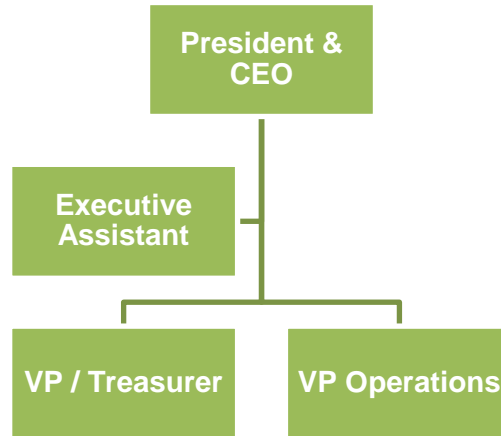
**Exhibit III – 3**  
**Wellsboro Electric Company**  
**Organization Chart**  
**As of July 2019**



Source: Data Request EM-3

Valley has a seven-member Board discussed in more detail in Chapter IV – Corporate Governance. The Valley organization chart is displayed in Exhibit III-4. Valley is directed by its President and CEO with a Vice President and Treasurer and a Vice President of Operations reporting to the President. In 2019, current priority capital projects include installation/upgrading of the Automated Meter Reading System, Supervisory Control and Data Acquisition System (SCADA), Geographic Information System, and Work Management System; and an expansion project into East Athens, PA.

**Exhibit III – 4  
Valley Energy, Inc.  
Organization Chart  
As of July 2019**



Source: Data Request EM-3

## **Findings and Conclusions**

Our examination of the Executive Management and Organizational Structure included a review of Citizens', Valley's and Wellsboro's organizational structure; staffing levels and spans of control; the roles and responsibilities of executive management; strategic planning; and succession planning. Based on our review, Wellsboro and Valley should initiate or devote additional effort to improving the efficiency and/or effectiveness of its Executive Management and Organizational Structure by addressing the following:

**1. Wellsboro Electric Company's CEO<sup>2</sup> has taken on additional responsibilities within other affiliates and has determined the need to relinquish his duties as the CEO of Wellsboro Electric Company.**

As previously mentioned, Wellsboro's CEO serves as the CEO of Tri-County in addition to serving Wellsboro. Throughout the audit period, Tri-County was engaging in a new venture to develop a new non-regulated subsidiary which will begin to require more attention going forward into 2020. Not only is Wellsboro's CEO serving as the CEO of Tri-County, but he is also serving as the CEO of Tri-County's new subsidiary as well.

Wellsboro's CEO recognizes that the responsibilities of his role as Tri-County's and its new subsidiary's CEO has reduced the time available for the responsibilities of the Wellsboro CEO role. Wellsboro's CEO has proposed a plan to step-down from the Wellsboro CEO position and relinquish the position to the current Vice President of

---

<sup>2</sup> Referring to the CEO serving during the audit period and audit fieldwork.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

Engineering and Operations/Chief Operations Officer (COO) likely by the end of 2019. This proposed plan has been designed to ensure proper leadership is maintained at Wellsboro moving forward.

**2. Valley Energy, Inc.'s Annual Reports to the PUC contain discrepancies between schedules.**

The auditor did not perform a comprehensive review of the entire PUC annual report, but in a limited review, the following discrepancies were discovered in the last three available annual reports (i.e., years 2015 – 2017) as of the end of fieldwork on July 18, 2019 (note the 2018 annual report was delayed and was not available at the time):

- Unaccounted for gas volumes did not agree on Schedule 505 Gas Account – Natural Gas; and Schedule 600 – Classification of Customers, Units Sold and Operating Revenues by Tariff Schedule.
- Since the Panda Liberty Power Plant<sup>3</sup> went online for the reporting year 2016, the reported volumes for plant usage were not consistent on Schedules 505 and 600.
- Storage volumes did not agree on Schedule 505 Gas Account – Natural Gas and Schedule 510 Underground Gas Storage.

Under 66 Pa.C.S. § 504 and 52 Pa. Code § 59.48, all natural gas distribution companies (NGDC) subject to the jurisdiction of the PUC are required to file an annual gas report. All accounting terms and phrases used in this annual report are to be interpreted in accordance with the applicable Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission under 18 CFR Part 201. When any report is defective or believed to be erroneous, the reporting NGDC shall be notified and given reasonable time to make necessary amendments or corrections.

**Recommendation**

- 1. Assign the Wellsboro CEO position to a qualified individual able to devote the necessary time to provide adequate leadership to Wellsboro by year end 2019.**
- 2. Enhance internal controls to ensure that all schedules in Valley Energy's Annual Report to the PUC contain accurate reporting and correct any sources of errors.**

---

<sup>3</sup> The Panda Liberty Power Plant is a natural gas power plant near Wysox, PA which constitutes over 90% of the total reported volumes sold at Valley.

## IV. CORPORATE GOVERNANCE

### **Background**

As discussed in Chapter II – Background, Citizens' Electric Company of Lewisburg (Citizens'), Wellsboro Electric Company (Wellsboro), and Valley Energy, Inc. (Valley) (collectively referred to as the C&T companies) are wholly-owned subsidiaries of C&T Enterprises, Inc. (C&T). C&T is a for-profit subsidiary owned equally by two non-regulated electric cooperatives, Tri-County Rural Electric Cooperative, Inc. (Tri-County) and Claverack Rural Electric Cooperative, Inc. (Claverack).

Although each of the three regulated utilities-Citizens', Wellsboro, and Valley; are owned by C&T, each has been allowed the autonomy to operate independently under the guidance of its individual board of directors. C&T's Board of Directors acts as a collaboration partner within the affiliate group as well as organizes the shared services mentioned in Chapter III – Executive Management and more thoroughly discussed in Chapter V – Affiliated Interests and Cost Allocations.

Per the C&T Bylaws, the C&T Board of Directors shall consist of no more than eleven, and no less than seven persons. A board seat is allotted to the Claverack and Tri-County Chief Executive Officers (CEO) and each is to serve in his/her capacity without additional compensation. Up to an additional nine directors are elected by the corporation shareholders. As of July 2019, there were ten directors serving on the C&T Board of Directors. The C&T Board of Directors provide oversight to C&T through the following three committees:

- Executive Committee – meets annually, or as needed, to review performance of the co-CEOs, the expenses of directors and key employees, and other corporate matters deemed appropriate;
- Bylaw and Policy Committee – meets annually, or as needed, to establish and review policies of the corporation and the C&T Board of Directors.
- Budget Committee – meets annually, or as needed, to review finances and budgets of the corporation.

In addition to the C&T Board Committees, C&T provides collaboration support to the affiliate members through its C&T Oversight Committee which is a management committee that discusses efficiencies, best practices, and emerging technologies.

Citizens' is governed by a nine-member board of directors from varying educational and professional backgrounds. The Citizens' Board of Directors provides oversight through the following four board committees:

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

- Executive Committee – responsible to review and approve corporate objectives, goals, and accomplishments; evaluate CEO performance and approve CEO and key executive compensation; perform the nomination function when filling vacant board seats; and address other corporate issues which do not fall within the responsibility of other established committees.
- Audit and Finance Committee – responsible to review the capital and operating budgets, budget variance reports, and financial statements; review the five-year financial plan; make recommendations for engagement with an external auditing firm and review the annual financial audit and evaluation of internal controls reports thereof; and review investment and borrowing activities.
- Bylaw and Policy Committee – responsible to routinely review established bylaws and policies to ensure they are consistently applied and are in accordance with laws and regulations; establish new bylaws/policies to recommend for full board approval as industry trends and emerging issues warrant; and to review updates recommended by regulators, auditors, or legal consultants.
- Customer and Community Relations Committee – responsible to maintain a strong community presence; identify, review, and recommend local charitable organizations to receive corporate donations; and monitor local issues of potential impact to the company.

Similarly, Wellsboro is governed by a nine-member board of directors from varying educational and professional backgrounds. The Wellsboro Board of Directors provides oversight through the following five board committees:

- Executive Committee
- Audit/Budget/Finance Committee
- Building Committee
- Bylaw & Policy Committee
- Consumer/Community Services Committee

The responsibilities of the Executive Committee, Audit/Budget/Finance Committee, Bylaw & Policy Committee, and Consumer/Community Services Committee are closely aligned to those outlined above for Citizens'. In addition, the Building Committee is responsible to review future and in-progress capital projects as well as review and recommend maintenance projects at the Wellsboro office.

Valley has a slightly smaller board of seven directors. The Valley Board of Directors provides oversight through the following four board committees:

- Executive Committee
- Audit & Finance Committee

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

- Bylaw & Policy Committee
- Local Affairs Committee

The responsibilities of the four Valley Board Committees are closely aligned to the correlative board committees at both Citizens' and Wellsboro.

The auditors reviewed the board and board committees' meeting agendas and minutes throughout the audit period. We found that each board and board committee appears to engage in appropriate activities to fulfill its intended mission and meets regularly and acts accordingly to provide meaningful guidance to those in the affiliate group.

The C&T companies do not utilize a formal internal audit department mainly due to smaller size and less complex operations. Each of the three regulated utilities established separation of duties as well as review and approval activities within its routine operations to ensure accurate transactions and limit errors. The Chief Financial Officer of C&T provides an additional layer of review and approval to further support accurate transactions and sound records.

Although each of the affiliates of the C&T companies has the autonomy to retain an external auditing firm of its own choosing, to maximize efficiencies and economies of scale, the affiliate group has chosen to engage with one external auditing firm to provide auditing and consulting services to the organization as a whole. Individual audit reports are developed for each affiliate and, subsequently, the external auditing firm presents its findings to the respective committees and boards. Due to the rural environment in which the C&T organization operates, there are limited opportunities to rotate external auditing firms; however, the company does have a lead partner rotation policy to support auditor independence.

Both individually and collaboratively under the C&T umbrella, the organization affiliates provide clear expectation of ethical conduct by directors and employees. The policies outline how to report unethical behavior and handle potential conflicts of interest as well as emphasize that employees reporting suspicious behavior will be protected from retaliation.

### **Findings and Conclusions**

Our examination of the corporate governance function included a review of the respective boards including the board committee structures and charters, policies and procedures, and the reporting relationships and operations of the external auditing firm. Based on our review of the corporate governance function, nothing came to our attention that would lead the auditors to conclude that areas reviewed were not being addressed adequately.

### **Recommendations**

None



## V. AFFILIATED INTERESTS AND COST ALLOCATIONS

### **Background**

As discussed in Chapter II – Background, Citizens' Electric Company of Lewisburg (Citizens'), Wellsboro Electric Company (Wellsboro), and Valley Energy, Inc. (Valley) (collectively referred to as the C&T Companies) are wholly-owned subsidiaries of C&T Enterprises, Inc. (C&T). C&T is a for-profit subsidiary owned equally by two non-regulated electric cooperatives, Tri-County Rural Electric Cooperative, Inc. (Tri-County) and Claverack Rural Electric Cooperative, Inc. (Claverack). This chapter presents the results of the auditor's review of the nature and extent of transactions between the affiliate group comprised of the C&T companies, C&T, Tri-County, and Claverack.

The general affiliate activities of the C&T companies are defined by agreement and have been filed with the Pennsylvania Public Utility Commission for appropriate disclosure and approval. As addendums to the main affiliated interest agreement, there are lease agreements and contracts for specific services which provide parameters and cost details. The underlying term throughout these agreements is that the transactions between affiliates are to be priced at cost or market rate whichever is less. In addition, the C&T Companies have entered into mutual aid agreements within the affiliate group as well as with regionally-appropriate non-affiliate companies to ensure access to the necessary resources for emergency restorative processes. The underlying motivation of the extensive affiliate activities of the C&T companies is to afford each of the smaller entities of the affiliate group the benefits of a much larger entity in terms of securing both human and operational resources. C&T provides the following centralized support services to the affiliate group:

- Treasury & Corporate Finance
- Human Resources
- Information Technology
- Corporate Communications
- Safety and Compliance
- After-hours Call Center
- Key Accounts Advisory
- Group Member Services
  - Management
  - Construction
  - Engineering

The costs associated with the services are directly charged whenever the service can be attributed to an affiliate and are otherwise allocated across the affiliate group. The approved allocation methodology is derived of a weighted allocation factor based 60% on active meters and 40% on revenue. There are two exceptions to this general allocation methodology. The financial support activities of C&T's Chief Financial Officer

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

are specifically to the benefit of the three regulated utilities and, therefore, are allocated at 33.33% each. The second exception is the cost allocation of the expenses associated with the after-hours call center.

One service requirement of any entity providing utility services is to have availability to answer service-related inquiries after normal business hours. The costs associated with maintaining an after-hours call center facility are quite burdensome to a small utility. C&T recognized the opportunity to realize economies of scale within this function by providing an after-hours call center facility to provide this service on behalf of the affiliate group in full. C&T operates the after-hours call center within space it leases from Wellsboro on the second floor of Wellsboro's headquarters building. C&T evaluated its call center's service potential and additionally recruited non-affiliate call center customers to further mitigate the expense burden of call center operations on the affiliate group. C&T maintained contracts with four non-affiliate call center customers as of the end of 2018.

C&T projects annual call center operation costs each year. These are used within the calculation to determine each affiliate's monthly charge for use of the call center. Call center operation costs consist of call center operators' salaries and benefits, facility rent, liability insurance, depreciation, estimated basic phone service, and maintenance contracts. The annual allocation calculation takes into consideration each affiliate's gross plant, operating and maintenance expense, revenue, number of meters, and number of call minutes utilized over the prior year to determine allocation factors. The projected annual cost of call center operations is multiplied by each affiliate member's calculated allocation factor and then is divided by twelve to determine the monthly fixed charge. In addition to the monthly fixed charge, affiliates are charged a per call/service variable charge each month to more closely align current cost with current actual usage. At the end of each year, revenue collected from the fixed and variable monthly charges to the affiliates as well as the negotiated monthly charges to the non-affiliate call center customers is reconciled with actual call center operation costs and any surplus revenue is returned or any deficit is collected in a one-time true-up using the appropriate allocation factors.

A summary of shared services charges allocated to each affiliate for the last full year of the audit period is presented in Exhibit V-1 to demonstrate the efficiencies of scale gained through this affiliation.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit V – 1**  
**C&T Enterprises, Inc.**  
**Summary of Shared Services Charges**  
**For the Year Ended December 31, 2018**

<b>Company</b>	<b>Shared Support Services Allocation</b>	<b>Financial Support Allocation</b>	<b>After-hours Call Center Expense Allocation</b>
<b>Citizens'</b>	\$ 214,913	\$ 74,869	\$ 43,970
<b>Claverack</b>	\$ 522,933	---	\$ 175,949
<b>Tri-County</b>	\$ 522,599	---	\$ 182,004
<b>Valley</b>	\$ 212,744	\$ 74,869	\$ 38,784
<b>Wellsboro</b>	\$ 195,391	\$ 74,869	\$ 45,178
<b>Total</b>	\$ 1,668,580	\$ 224,607	\$ 485,885 <sup>4</sup>

Source: Data Request AI-16

In addition to the general affiliate activities, there are two unique affiliate transactions that individually affect two of the regulated utilities. The first unique affiliate transaction affects Wellsboro. During the audit period, the Chief Executive Officer (CEO) of Wellsboro also served as the CEO of Tri-County and therefore, his direct payroll and administrative expenses were allocated between the two entities. The second unique affiliate transaction affects Valley. Valley maintains gas distribution operations for divisions in Pennsylvania and New York. The executive management and administrative functions are performed on behalf of both divisions and, therefore, the associated expenses of those functions are allocated to each division accordingly. To become effective April 1<sup>st</sup> each year, Valley's treasurer calculates an allocation factor for each division considering each division's percentage of total operating and maintenance expense, net plant, average customer count, and exempt payroll.

### **Finding and Conclusion**

Our examination of the affiliated interests and cost allocations function included a review of contracts and agreements governing transactions among affiliates, cost allocation methodologies, policies and procedures, etc. Based on our review of Citizens', Wellsboro's, and Valley's affiliated transactions, no evidence came to our attention that would lead the auditors to conclude that the areas reviewed were inadequately addressed.

### **Recommendations**

None

<sup>4</sup> Total excludes an additional \$78,859 which was collected from the four non-affiliate call center customers.

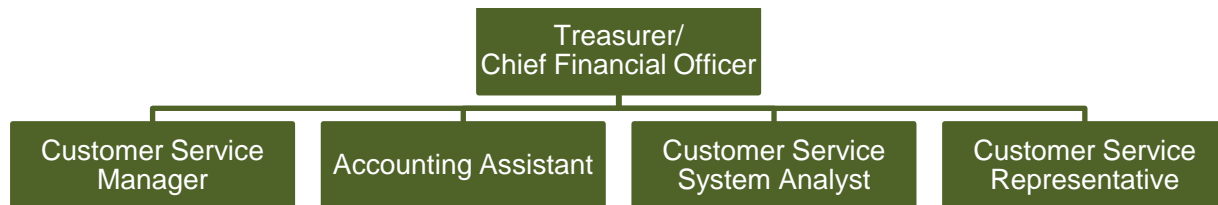
## VI. FINANCIAL MANAGEMENT

### Background

As discussed in Chapter II – Background, Citizens' Electric Company of Lewisburg (Citizens'), Wellsboro Electric Company (Wellsboro), and Valley Energy, Inc. (Valley) (collectively referred to as the C&T Companies) are wholly-owned subsidiaries of C&T Enterprises, Inc. (C&T). C&T is a for-profit subsidiary owned equally by two non-regulated electric cooperatives, Tri-County Rural Electric Cooperative, Inc. (Tri-County) and Claverack Rural Electric Cooperative, Inc. (Claverack).

Each of the C&T companies has retained independence to manage its finances. Each maintains a financial management group that performs budgeting, cash management, general accounting, and financial reporting. The organizational structure of each of the C&T Companies' financial management group is presented in Exhibits VI-1 through VI-3.

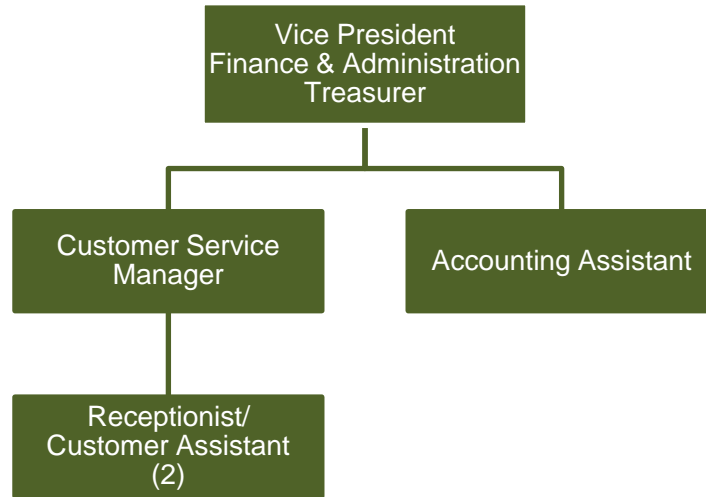
**Exhibit VI – 1**  
**Citizens' Electric Company of Lewisburg**  
**Financial Management Organizational Structure**  
**As of July 2019**



Source: Data Request EM-3

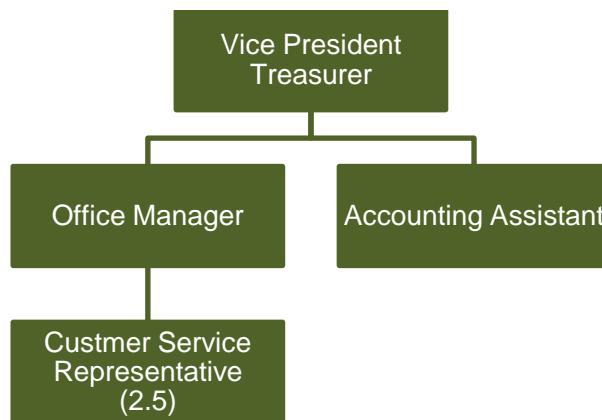
Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit VI – 2**  
**Wellsboro Electric Company**  
**Financial Management Organizational Structure**  
**As of July 2019**



Source: Data Request EM-3

**Exhibit VI – 3**  
**Valley Energy, Inc**  
**Financial Management Organizational Structure**  
**As of July 2019**



Source: Data Request EM-3

The C&T Chief Financial Officer (CFO) provides corporate financial support to each of the C&T companies primarily in the areas of regulatory compliance and short- and long-term financing strategy. The CFO also provides an additional layer of review of accounting transactions, cash management reports, and monthly financial statements.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

All C&T companies utilize a standard budgeting process. Beginning in the third quarter each year, the treasurer/CFO gathers and compiles budgeting data for both the capital and operating budgets. Historical data over the prior three years, expected projects and work activities planned for completion over the upcoming year(s), projected energy/fuel costs, projected payroll increases, and projected shared services expenses are factors considered throughout the preparation of the annual budgets as well as the rolling five-year work plans. The proposed capital and operating budgets are reviewed and approved by the Chief Executive Officer (CEO) and then presented to the respective boards for final approval. The approved capital and operating budgets of each of the C&T companies is then submitted to the C&T Board of Directors for informational purposes. After the annual budgets have been approved, the respective treasurer/CFO of each C&T company would work with the C&T CFO to discuss any short- or long-term financing necessary to support the annual budgets and/or the five-year work plans.

Because of the small size of each of the C&T companies, the financial management group of each maintains continuous daily review of cash management reports and monthly review of budget variance reports and financial statements. This information is provided to the respective boards during every regular board meeting which occurs quarterly for both Citizens' and Valley and every other month for Wellsboro.

A summary of the capital structures of the C&T Companies is presented in Exhibit VI-4. Citizens' maintains the most conservative position with the lowest percentage of debt, Valley carries the more traditional utility industry standard debt ratio, and Wellsboro carries the most debt having undergone considerable system improvement since it was acquired. Although Wellsboro carries a high percentage of debt, it has been systematically paying down its debt year after year and funding capital and operating projects within budget to improve this ratio.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit VI – 4**  
**C&T Companies**  
**Summary of Capital Structure**  
**For the Years Ended December 31, 2016 – 2018**

Citizens' Electric Company of Lewisburg			
	2016	2017	2018
Debt	11.34%	16.57%	15.33%
Equity	88.66%	83.43%	84.65%
Total	100.00%	100.00%	100.00%
Wellsboro Electric Company			
	2016	2017	2018
Debt	78.72%	77.76%	75.73%
Equity	21.28%	22.24%	24.27%
Total	100.00%	100.00%	100.00%
Valley Energy, Inc			
	2016	2017	2018
Debt	52.69%	48.09%	43.43%
Equity	47.31%	51.91%	56.57%
Total	100.00%	100.00%	100.00%

Source: Annual Earnings Reports filed with the Pennsylvania Public Utility Commission

Because the companies are ultimately owned by two electric cooperatives, each has access to favorable financing terms through the National Cooperative Services Corporation (NCSC). C&T has arranged for a master letter of credit through NCSC as well as a \$7 million revolving line of credit of which each regulated subsidiary has access to a portion.

Although C&T does not have a defined dividend policy, the C&T Board of Directors reviews the financial health and upcoming business activities of each of the C&T companies annually to determine if it is reasonable and prudent to recommend a dividend. The board of each operating company assesses the dividend recommendation and makes the final determination on dividend declaration and amount. Exhibit VI-5 shows the net income and correlative dividend payment of each of the C&T Companies over the period 2014 – 2018. The dividend payout ratio is the percentage of net income to which the dividend is equal. Dividends recommended by C&T were reasonable and did not threaten the financial wellness of any of the C&T companies.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit VI – 5  
C&T Companies  
Dividend Payout Ratio  
For the Years 2014 – 2018**

Citizens' Electric Company					
	2014	2015	2016	2017	2018
Net Income (thousands)	\$274.3	\$168.4	\$164.7	\$487.2	\$144.0
Dividend Paid (thousands)	\$0	\$10.5	\$30.2	\$31.5	\$34.0
Dividend Payout Ratio	0.00%	6.23%	18.34%	6.47%	23.62%
Wellsboro Electric Company					
	2014	2015	2016	2017	2018
Net Income (thousands)	\$265.3	\$245.5	\$35.6	\$352.2	\$224.3
Dividend Paid (thousands)	\$0	\$0	\$0	\$0	\$0
Dividend Payout Ratio	0.00%	0.00%	0.00%	0.00%	0.00%
Valley Energy, Inc					
	2014	2015	2016	2017	2018
Net Income (thousands)	\$3,460.2	\$1,257.1	\$673.9	\$1,145.0	\$1,101.8
Dividend Paid (thousands)	\$0	\$79.4	\$144.3	\$92.6	\$74.2
Dividend Payout Ratio	0.00%	6.32%	21.41%	8.09%	6.73%

Source: Annual Statements of Stockholders Equity and auditor analysis

### **Findings and Conclusions**

Our examination of the financial management function included a review of accounting policies and procedures; capital and operating budget preparation, monitoring, reporting, and variance management processes; short and long-term financing activities; and dividend policies. Based on our review of the financial management function, nothing came to our attention that would lead the auditors to conclude that areas reviewed were not being addressed adequately.

### **Recommendations**

None



## VII. ELECTRIC OPERATIONS

### Background

As discussed in Chapter II – Background, C&T Enterprises, Inc (C&T) operates two regulated electric distribution companies (EDCs); Citizens' Electric of Lewisburg (Citizens') and Wellsboro Electric Company (Wellsboro). Electric distribution operations are performed by various personnel from C&T, Citizens', and Wellsboro. Citizens' and Wellsboro operate independently from each other and their two non-regulated ownership entities of Tri-County Rural Electric Cooperative, Inc. (Tri-County) and Claverack Rural Electric Cooperative, Inc. (Claverack). An overview of the service territory statistics for Citizens' and Wellsboro is displayed in Exhibit VII-1 (also see service territory map in Chapter II – Background, Exhibit II-2).

**Exhibit VII – 1  
Citizens' Electric Company of Lewisburg and Wellsboro Electric Company  
Service Territory Overview  
As of December 31, 2018**

Company	Number of Customers	Service Territory	Mega-Watt Hours
<b>Citizens'</b>	7,056	Union County serving the boroughs of Lewisburg, Buffalo, East Buffalo and, Kelly and West Buffalo townships.	178,007
<b>Wellsboro</b>	6,343	Tioga County serving the boroughs of Wellsboro and Delmar, Middlebury and Charleston townships.	106,161

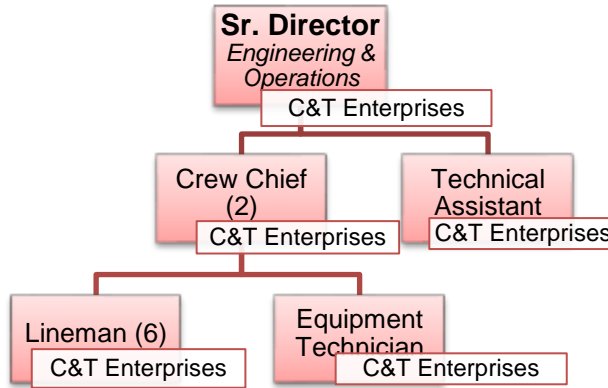
Source: 2018 PUC Annual Reports

Citizens' electric operations organization is shown in Exhibit VII-2. The Senior Director of Engineering and Operations (E&O) has the general responsibility of overall system planning, reliability analysis, outage management system, contractors, distribution line work design and oversight, and purchase orders. The Technical Assistant reports to the Senior Director and assists in PA One Call<sup>5</sup> inquiries, purchasing materials, liaison for third-party contractors (i.e., tree trimming and pole inspections). There are two Crew Chiefs overseeing and helping perform fieldwork with company linemen and interact with customers in the field. Also, reporting to the Crew Chiefs is an Equipment Technician tasked with oversight of Automated Meter Reading devices, including testing and installation, and other general distribution equipment maintenance.

<sup>5</sup> Pennsylvania One Call System, Inc. is a non-profit 501(c) (6) Pennsylvania corporation created to help protect the underground facilities of members through communication with any person(s) planning to disturb the earth. This communication network receives and processes underground line location requests from excavators, contractors, plumbers, builders, designers, and the general public; and disseminates this work location information to all members based on their service agreements.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit VII – 2**  
**Citizens' Electric Company of Lewisburg**  
**Electric Operations Organizational Chart**  
**As of March 2019**

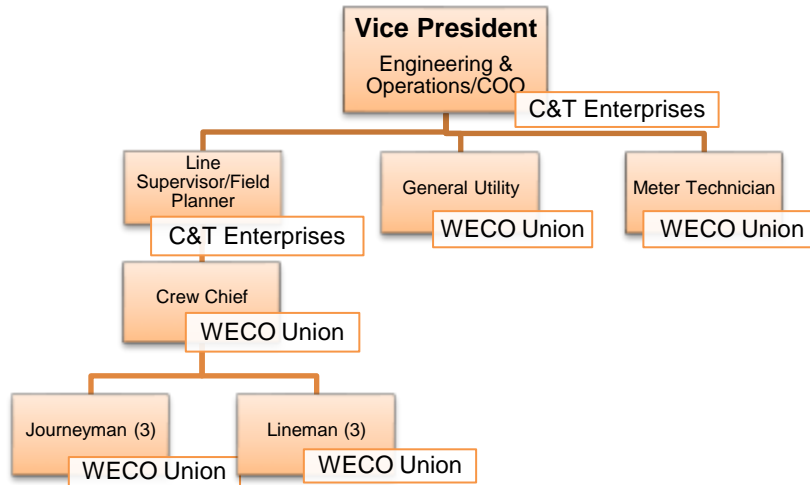


Source: Data Request EM-3

The electric operations organization of Wellsboro is shown in Exhibit VII-3. The VP of Engineering & Operations/COO has similar duties as the Citizens' Senior Director and has three direct reports: a Line Supervisor/Field Planner has responsibility for the line supervision scheduling and creating work orders; a General Utility worker for inspection and maintenance (I&M) activities; and, a Meter Technician for meter installations and testing. The Crew Chief ensures the work being laid out is performed by the Linemen and reviews with the Line Supervisor/Field Planner on a daily basis. Certain field employees are unionized and represented by the International Brotherhood of Electrical Workers Local 1319; these positions are distinguished in Exhibit VII-3.

The Electricity Generation Customer Choice and Competition Act (Act), 1996, Dec. 3, P.L. 802, No. 138 § 4, became effective January 1, 1997. The Act amends Title 66 of the Pennsylvania Consolidated Statutes ("Public Utility Code" or "Code") by adding Chapter 28 to establish standards and procedures to create direct access by retail customers to the competitive market for the generation of electricity, while maintaining the safety and reliability of the electric system. Specifically, at 66 Pa. C.S. § 2802(12) the Public Utility Commission (Commission) was given a legislative mandate to ensure that levels of reliability that were present prior to the restructuring of the electric utility industry would continue in the new competitive markets.

**Exhibit VII – 3  
Wellsboro Electric Company  
Electric Operations Organizational Chart  
As of March 2019**



Source: Data Request EM-3

In response to this legislative mandate, the Commission adopted a Final Rulemaking Order on April 23, 1998, at Docket No. L-00970120, setting forth reporting requirements designed to ensure the continuing safety, adequacy and reliability of the transmission and distribution of electricity in the Commonwealth (see 52 Pa. Code §§ 57.191-57.197). The Final Rulemaking Order acknowledged that the Commission could reevaluate its monitoring efforts later as deemed appropriate. This reference is below:

Pa Code § 57.194. Distribution system reliability.

(e) An EDC shall design and maintain procedures to achieve the reliability performance benchmarks and minimum performance standards established by the Commission.

The Amended Reliability Benchmarks and Standards for the Electric Distribution Companies at Docket No. M-00991220 issued May 7, 2004, changed the measures for each reliability index to the current 12-month standard, 36-month standard, and benchmark. The benchmark is the value that the EDC should strive for, whereas the respective standards are the minimum acceptable performance. Although overall system performance trends that fall in the range between the benchmark and the standard will not be subject to compliance enforcement, the Commission will keep EDCs whose performance is within the standard, but trending away from the benchmark, under review as a precautionary measure. Reliability performance benchmarks were based upon the five-year average of reported performance for each EDC for the period 1994 through 1998. Only major events were excluded from this reported performance. In general, major events are service interruptions affecting at least 10% of the customers in an EDC's service territory during an event that lasts five minutes or greater in duration. Benchmark performance represents the historical

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

reliability performance of each EDC prior to the Act and the restructuring of the electric utility industry in Pennsylvania.

The definitions of the three reliability indices monitored by the Commission are as follows (definitions from the Institute of Electrical and Electronics Engineers or IEEE):

1. System Average Interruption Frequency Index (SAIFI)

*Definition (IEEE P1366): The system average interruption frequency index calculates how often the average customer experiences a sustained interruption over a predefined period of time.*

*Mathematically:*

$$SAIFI = \frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

2. Customer Average Interruption Duration Index (CAIDI)

*Definition (IEEE P1366): CAIDI represents the average time required to restore service.*

*Mathematically:*

$$CAIDI = \frac{\sum \text{Customer Minutes of Interruption}}{\text{Total Number of Customer Interruptions}}$$

3. System Average Interruption Duration Index (SAIDI)

*Definition (IEEE P1366): This index calculates the total duration of interruptions for the average customer during a predefined period of time.*

*Mathematically:*

$$SAIDI = \frac{\sum \text{Customer Minutes of Interruption}}{\text{Total Number of Customers Served}}$$

SAIDI is the mathematical product of SAIFI and CAIDI.

$$SAIDI = SAIFI \times CAIDI$$

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

Through submission of annual and quarterly Electric Reliability Reports provided to the Bureau of Technical Utility Services (TUS), the audit staff was able to review and examine Citizens' and Wellsboro's electric reliability performance for three calendar years from 2016 through 2018, and through the 2<sup>nd</sup> quarter of 2019. Their respective reliability performance, along with the associated benchmarks and standards for each reliability metric are displayed in Exhibit VII-4.

**Exhibit VII – 4**  
**Citizens' Electric Company of Lewisburg and Wellsboro Electric Company**  
**Electric Reliability Performance**  
**For the Years 2016 through 2018 and 2<sup>nd</sup> Quarter 2019**

	Benchmark	Standard	2016	2017	2018	2019 2nd Q	36-Month Standard	36-Month Average*
<b>Citizens' Electric Company of Lewisburg</b>								
<b>SAIFI</b>	0.20	0.27	0.26	0.45	0.21	0.31	0.22	0.31
<b>CAIDI</b>	105	141	108	185	76	83	115	123
<b>SAIDI</b>	21	38	28	84	16	25	25	43
<b>Wellsboro Electric Company</b>								
<b>SAIFI</b>	1.23	1.66	1.64	1.06	1.36	1.17	1.12	1.35
<b>CAIDI</b>	124	167	88	99	131	110	136	104
<b>SAIDI</b>	153	278	145	105	178	128	185	140

\*For the calendar years 2016-2018  
Source: PUC Annual Electric Reliability Reports

As shown in Exhibit VII-4, Citizens' did not achieve standard performance in any of the reliability metrics during the 2017 calendar year. Citizens' experienced a noteworthy increase in storm outages in 2017; however, these storms did not meet major storm exclusion requirements, therefore the data is included in measured reliability performance. The number of customers affected and customer-minutes caused by weather/storm are provided in Exhibit VII-5. Nevertheless, TUS considers Citizens' SAIDI and SAIFI results as some of the best in Pennsylvania. Furthermore, even though Citizens' has exceeded individual metrics in 2017, Citizens' has the most stringent standard and benchmark requirements relative to other Pennsylvania electric distribution companies. Wellsboro reliability metrics have met the standard each year and missed benchmark performance in 2018 only. Based on this information, the reliability performance reviewed was deemed satisfactory and no further investigation was warranted.

**Exhibit VII – 5**  
**Citizens' Electric Company of**  
**Lewisburg**  
**Storm Outage Statistics**  
**For the Years 2016 through 2018**

	2016	2017	2018
Customers Affected	133	2,135	311
Customer Minutes	10,647	286,053	37,677

Source: PUC Annual Electric Reliability Reports

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

I&M programs are designed and established by Citizens' Senior Director and Wellsboro's VP of Engineering & Operations/COO. The programs and policies are based on regulatory requirements and current industry best practices. The I&M programs include various levels of planned maintenance for in-service equipment. Along with the planned maintenance, there is defined inspection cycles based on regulatory requirements and/or manufacturer recommendations. Current inspection cycles are the same at each company unless noted for the electric distribution equipment and are as follows:

- Vegetation Management – visual inspection annually for Citizens' and every two years at Wellsboro to assess the condition of vegetation on and off right of way to identify any potential risks.
- Pole Inspections – visually inspected and drill testing at and below ground level every 10 years.
- Distribution Overhead Circuits and Equipment – visually inspected by ground patrol or drone annually (Citizens') and every two years (Wellsboro).
- Pad Mount Transformers – visually inspected on four-year cycle for Wellsboro and Citizens'.
- Distribution Poles – visually inspected on a 12-year cycle, hammer sounding on poles older than 12 years, partial excavation and boring of poles 35 years old or older (Wellsboro). Inspected on a 10-year cycle. Poles less than 10 years old are visually inspected, sounded, bored and treated internally, if needed. In addition to the above tasks, poles 10 years or older are excavated and treated externally as required (Citizens').
- Reclosers – visually inspected on an annual basis.
- Substation – inspections are conducted on a monthly basis.

Additionally, all I&M work and projects are completed by trained company personnel or qualified contractors as needed.

### **Findings and Conclusions**

Our examination of the electric operations organizations included a review of daily operations, vegetation management, system reliability, maintenance policies and procedures, staffing levels, system planning, etc. Based on our review, Citizens' and/or Wellsboro should initiate or devote additional efforts to improving the efficiency and the effectiveness of its electric operations by addressing the following:

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**1. Wellsboro is experiencing a significant increase in outages attributed to unknown causes in recent years.**

When an outage occurs, an EDC sets priority to restore power and attempt to identify the cause of each outage. Outage information is reported and tracked within an outage management system (OMS). The outage causal codes provide the company and Commission with detailed information about the factors causing outages. This enables the company to direct maintenance, capital or other work in the areas causing outages or problems to the utility.

In most cases, there are easily identifiable indications for the cause of an outage during restoration. However, not all outage causals are perceptible without a thorough investigation post-restoration. As expected, when an EDC cannot recognize the cause of an outage, the outage is coded as “unknown.” Although unknown outage causals are not uncommon, it does not provide an EDC with relevant data making it difficult to effectively target system improvements or I&M activities to reduce future outages. The number of unknown outages and total outages is provided in Exhibit VII-6, along with the percentage of unknown outages and how they attribute to overall SAIFI based on customer affected.

**Exhibit VII – 6  
Wellsboro  
Unknown Outage Statistics  
For the Years 2015 through 2018 and 2<sup>nd</sup> Quarter 2019**

	2015		2016		2017		2018		2019 2nd Q	
	# of Outages	Customer Affected	# of Outages	Customer Affected	# of Outages	Customer Affected	# of Outages	Customer Affected	# of Outages	Customer Affected
<b>Total</b>	170	5,209	217	10,138	197	6,751	346	8,588	288	7,342
<b>Unknown</b>	2	2	6	6	26	515	80	974	60	573
<b>% Unknown</b>	1.2%		2.8%		13.2%		23.1%		20.8%	
<b>% of SAIFI</b>	0.0%		0.1%		7.6%		11.3%		7.8%	

Source: PUC Annual Electric Reliability Reports

Wellsboro experienced a significant increase in the number of outages in the 2018 calendar year and continued into 2<sup>nd</sup> quarter 2019 as compared to previous years. It should be noted that Wellsboro does operate a large portion of its electric system within rural northern Pennsylvania with distribution lines running through remote areas with large off-road ROWs. Unknown outages totaled 80 interruptions, or 23.1% of total outages, for 2018, and for the 12 rolling months ending the 2<sup>nd</sup> quarter of 2019 tallied 60 interruptions, or 20.8% of total outages. In the years preceding 2018 and 2019, unknown outages were nearly immaterial in 2015 (2) and 2016 (6), while 2017 exhibited a notable increase of 26 unknowns.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

As of mid-2018, the VP of Engineering & Operations/COO began providing a semiannual review of unknown outages to educate field employees on the importance of identifying outage causes for reporting purposes. However, a reduction in unknown outages has not been realized for 2018 through 2nd quarter of 2019, perhaps due to the infancy of the semiannual reviews. The auditors believe that it would be beneficial make additional efforts to investigate and collect additional information following outage restoration. Wellsboro requires its field operations employees to report outage information, including cause, and the equipment impacted while restoring an outage to be inputted into the company's OMS. In cases of unknown outages, reporting additional information (weather, physical condition, suspected cause, etc.) or a follow-up from another field employee providing a post-restoration review of the outage could be resourceful in reducing the use of unknown outage.

**Recommendation**

- 1. Reduce the number of unknown outages at Wellsboro by providing additional resources to assist in investigating unknown outages and/or through supplemental training for field operations employees.**



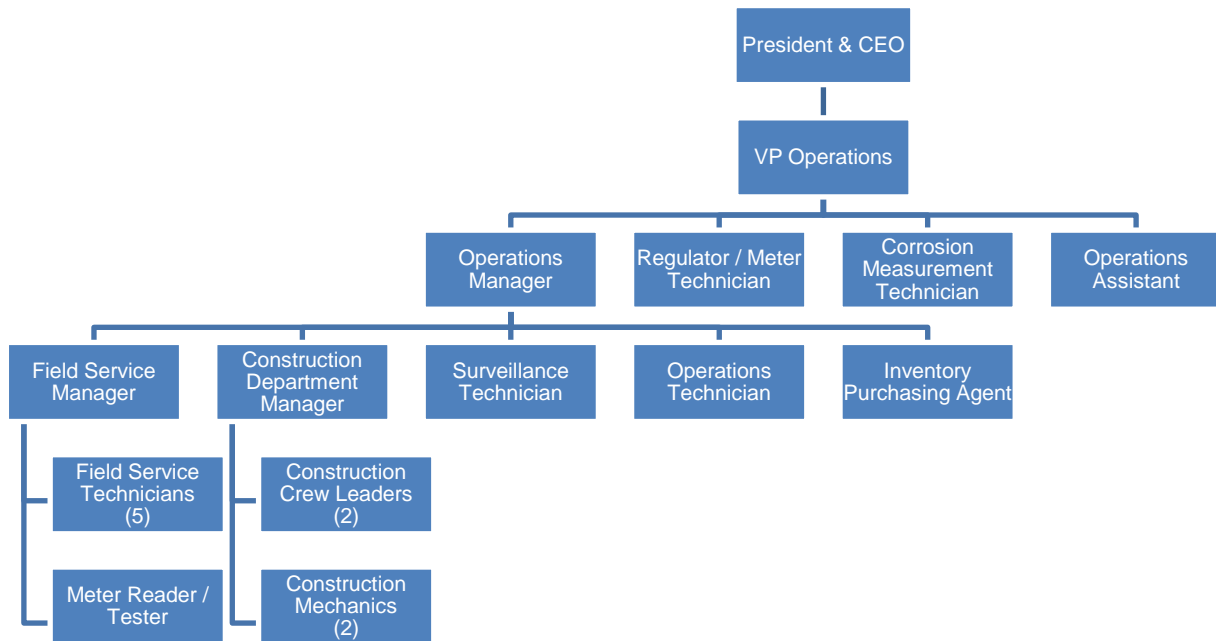
## VIII. GAS OPERATIONS

### Background

As stated in Chapter II – Background, Valley Energy, Inc. (Valley) is a public utility subject to regulation by the Pennsylvania Public Utility Commission (PUC or Commission). Valley is 100% owned by C&T Enterprises, Inc. (C&T). C&T is a for-profit subsidiary of two rural non-profit electric cooperatives which each have 50% ownership; Claverack Rural Electric Cooperative, Inc. (Claverack) and Tri-County Rural Electric Cooperative, Inc. (Tri-County).

Gas Operations functions for Valley are performed by the Vice President of Operations whose organizational reporting structure is displayed in Exhibit VIII-1. The Vice President of Operations reports directly to the President and CEO of Valley. A total of 19 positions are under the direction of the Vice President of Operations which include positions responsible for field service, construction, maintenance, meter related operations, leak surveillance, purchasing/inventory, and corrosion. All positions for gas operations reporting to the Vice President work standard hours (no shift work), only working after hours for emergencies when needed. Overtime for field operations at Valley is minimal while maintaining suitable emergency response rates. Statistics are displayed in Exhibit VIII-2 for overtime and Exhibit VIII-3 for emergency response.

**Exhibit VIII – 1  
Valley Energy, Inc.  
Gas Operations Department  
As of July 2019**



Source: Data Request EM-3

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit VIII – 2**  
**Valley Energy, Inc.**  
**Field Operations Overtime Levels by Percent of Straight Time Hours**  
**2014 to February 2019**

2014	2015	2016	2017	2018	Feb 2019
1.1%	2.6%	2.1%	1.3%	1.2%	2.1%

Source: Data Request GO-9

**Exhibit VIII – 3**  
**Valley Energy, Inc.**  
**Emergency Response Statistics**  
**2014 to February 2019**

	2014			2015			2016			2017			2018			Feb 2019		
Arrival Time (Minutes)	Working Hours	After Hours	Weekends	Working Hours	After Hours	Weekends	Working Hours	After Hours	Weekends	Working Hours	After Hours	Weekends	Working Hours	After Hours	Weekends	Working Hours	After Hours	Weekends
0-15	137	17	5	157	9	11	155	16	8	127	13	7	143	9	5	16	2	1
16-30	31	7	7	25	11	11	21	27	14	17	16	18	36	17	14	3	1	0
31-45	10	13	11	16	16	10	8	16	10	12	8	10	15	12	12	2	3	0
46-60	1	2	0	0	1	0	0	0	1	1	1	0	1	1	1	0	0	0
>60	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dispatch Time (>15Minutes)	0			2			0			2			1			1		

Source: Data Requests GO-17 and GO-24

Valley Energy does not have any unprotected bare steel or cast-iron mains in its distribution system. Valley's system consists of a combination of cathodically protected coated steel and plastic. Currently, Valley is replacing a specific type of vintage plastic (Aldyl-A) from the 1970's and 1980's that has been determined to fail prematurely over its life expectancy. Valley plans to have the remaining 7,300 feet of this pipe replaced by 2023.

Valley tends to have minimal leaks in the system, and when they occur, leaks are typically repaired in a timely fashion. Valley's leak information by class is displayed in Exhibit VIII-4. By definition, Class 1 leaks are leaks which need immediate attention due to volume or location. Class 2 leaks are determined non-hazardous at the time of detection but are scheduled for repair based on probable future hazard. Class 3 leaks are considered non-hazardous and can be reasonably expected to stay non-hazardous.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit VIII – 4  
Valley Energy, Inc.  
Leak History by Class  
2014 to Feb 2019**

Leaks		Year					
Class	Type	2014	2015	2016	2017	2018	Feb-19
1	Discovered	43	18	17	13	14	0
	Repaired	43	18	17	13	14	0
	Outstanding	0	0	0	0	0	0
2	Discovered	8	11	7	10	10	3
	Repaired	8	9	6	10	9	1
	Outstanding	0	2	1	0	1	2
3	Discovered	11	16	16	22	17	0
	Repaired	10	9	11	17	4	0
	Outstanding	1	7	5	5	3	0

Source: Data Request GO-19

Valley's damage prevention program, contractor education, and Pennsylvania One Call line marking, and mapping capabilities and accuracy were examined by the auditors. Both company-caused (e.g., mapping errors, line marking related causes, etc.) and contractor-caused damages (e.g., no locate calls, contractor errors, etc.) were reviewed. Exhibit VIII-5 shows the number of third-party line hits by cause for the period 2014 to February 2019. About 20% of Valley's third-party line hits for the period were from company-specific causes of lines not marked or lines marked incorrectly. Although ideally all third-party line hits should be eliminated, the auditors felt based on Valley's overall number of third-party line hits for a company of this size and an examination of the damage prevention program, there are no concerns from the auditors which required further action.

**Exhibit VIII – 5  
Valley Energy, Inc.  
Third-Party Line Hits Causal Analysis  
2014 to February 2019**

Cause	Year					
	2014	2015	2016	2017	2018	Feb-19
Mapping Errors	0	0	0	0	0	0
Line Not Marked	0	0	2	1	0	0
Line Marked Incorrectly	0	3	3	1	0	0
Excavator Failed to Expose	1	7	3	4	0	0
No Locate Requested	2	1	1	1	0	0
Insufficient Notification	0	0	0	0	0	0
Deliberate	0	0	0	0	0	0
Natural Forces	0	0	0	0	0	0
Excavator Error	2	0	2	3	12	0
Other	1	0	0	0	1	0
<b>Total</b>	<b>6</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>13</b>	<b>0</b>

Source: Data Request GO-14

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

Valley plans to expand upon its electronic technology systems which assist in gas operations beginning in the third and fourth quarters of 2019. Descriptions of the current technologies in use and planned upgrades are as follows:

- SCADA – a non-controllable version (a controllable version allows for remote control of valves, regulators, etc.) is currently used to monitor pressures, temperatures and odorization at critical stations. Additional monitoring equipment is scheduled for installation and ongoing (additional points of control) through 2021.
- GIS – an initial GIS platform will be implemented to digitize system maps and be available to field operations for enhanced damage prevention efforts and emergency response. This upgrade combined with the SCADA upgrade will assist the current hydraulic gas model currently used for system planning and maintenance analysis and hydraulic modeling solutions for network assets.
- Meter Reading – final replacement of Automated Meter Reading (AMR) equipment to reduce labor costs and improve efficiency of personnel
- Work Management System – an initial work management system for field service technicians to better streamline work processes will be implemented
- O&M and Emergency Plans – specifically a re-formatting of manuals for electronic access by operations personnel
- Meter Testing – adding computerized meter testing equipment to improve testing and reporting

### **Findings and Conclusions**

Our examination of Gas Operations at Valley Energy Inc. included a review of the operation and maintenance policies and procedures, main replacement program, leak surveys, leak repair backlogs, damage prevention program, unaccounted-for-gas levels, capital expenditure trends, staffing levels, contractor utilization, etc. Based on our review, no evidence was discovered that would lead the auditors to conclude that the areas reviewed were inadequately addressed.

### **Recommendations**

None

## IX. CUSTOMER SERVICE

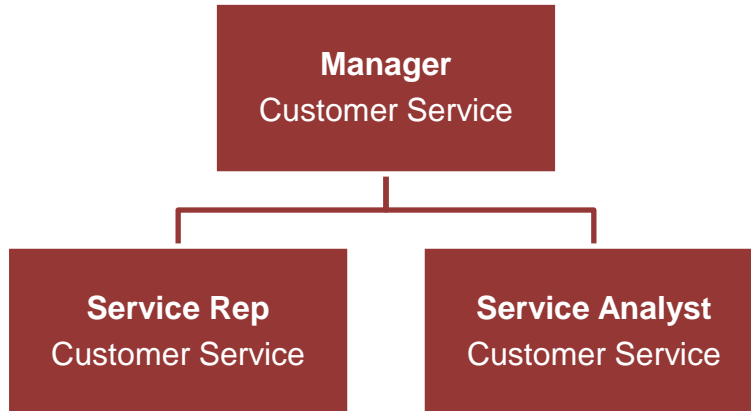
### Background

C&T Enterprises, Inc. (C&T) acts as a customer service support provider to each of its regulated utilities, Citizens' Electric Company of Lewisburg (Citizens'), Wellsboro Electric Company (Wellsboro) and Valley Energy, Inc. (Valley) (collectively referred to as the C&T companies), and other non-regulated business units. The customer service support received by the regulated utilities is provided by the Vice President of Communications, Chief Information Officer (CIO), and also the Manager of Call Center Operations whom reports directly to the CIO (refer to Chapter III – Executive Management Exhibit III-1). Their duties and responsibilities for C&T and the C&T Companies are, but not limited to, as follows:

- *Communications* - responsible for special customer service projects coordination, crisis and promotional activities, corporate spokesperson, press releases to media, producing billing inserts, and assisting C&T Companies' customer service managers.
- *Information Technology* – provide application and hardware support for customer information systems utilized by the C&T Companies, respond to trouble tickets, and daily backup of customer data.
- *Call Center Operations* – handle the after-hours customer calls from the C&T Companies, as well as, Claverack Electric Cooperative and Tri-County Electric Cooperative; these calls include customer billing, payments, disconnections, disruption of service, outage information, and other customer related questions. Payment arrangement requests calls are handled directly by the C&T companies.

The customer service function at the C&T companies are directed by a Customer Service Manager with support from two customer service representative/analysts (CSRs). The Customer Service Managers and CSRs are C&T employees conducting business strictly for their respective C&T Company. A representation of the customer service function for each of the C&T companies is depicted in Exhibit IX-1. The C&T companies maintain their own customer service manuals which provides staff members with detailed procedures for daily tasks. Daily tasks can include, but are not limited to, assisting walk-in customers, answering customer calls, payment processing, establish payment arrangements, collections, terminations and work service orders.

**Exhibit IX – 1  
C&T Companies  
Representative Organizational Structure for Customer Service  
As of March 2019**



Source: Data Request CS-1

To assist in daily operations and customer account management, the C&T companies utilize the National Information Solutions Cooperative (NiSC) application for the customer information system (CIS). The NiSC application suite provides a single source for accounting, customer care, billing, and other operational needs. The application allows CSRs the ability to provide a multitude of services for their respective company and customers in one platform. Additionally, by using the same enterprise system across the companies, the C&T Call Center can handle customer calls and requests in a timely manner.

Meter reading is completed through an automated system for Citizens' and Wellsboro, also referred to as two-way automatic communications system or more simply TWACS. TWACS can take several reads a day and upload these reads to the CIS. Valley utilizes a radio frequency-based method where a handheld device retrieves gas usage from customers' meters. At the end of each day, the handheld is connected to the network and reads are uploaded into the CIS. The C&T companies utilize billing cycles based on geography and/or customer types. The pre-bill process consists of reviewing and investigating exception reports (i.e. high/low reads, zero usage) to minimize billing errors. Exhibit IX-2 includes the total number of bills rendered versus the number of adjusted bills for the C&T Companies. Collectively, billing errors have been minimal and have averaged 0.1% of total of bills rendered annually.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit IX – 2  
C&T Companies  
Total Bills Rendered vs. Adjusted Bills  
For the Years 2015 through 2018**

	2015		2016		2017		2018		Avg. % Error
	Total Bills	Adjusted Bills	Total Bills	Adjusted Bills	Total Bills	Adjusted Bills	Total Bills	Adjusted Bills	
<b>Citizens'</b>	82,704	39	83,167	66	84,014	37	84,413	36	<b>0.05%</b>
<b>Wellsboro</b>	75,336	36	75,684	43	75,828	38	76,044	40	<b>0.05%</b>
<b>Valley</b>	76,612	94	78,309	104	80,545	88	80,766	117	<b>0.13%</b>
<b>C&amp;T Companies</b>	234,652	169	237,160	213	240,387	163	241,223	193	<b>0.06%</b>

Source: Data Request CS-5

Another important billing and collections performance measure is to determine the amount of receivables in arrears. Larger arrearage amounts and those over 90 days past due pose a risk to be uncollected. The C&T companies have been able to acquire constant and timely payments from customers through rapid response to payment arrangement requests, proper negotiation of payment arrangement requests when needed, proper use of customer assistance programs when applicable, and persistent collection of delinquent accounts. The C&T companies average monthly customer arrearage data is presented in Exhibit IX-3 for the years 2015 through 2018. Citizens' has consistently been able to keep 90-day arrears to under 1.0% of accounts receivable. From 2015 to 2018, Valley's 90-day arrears have decreased from approximately \$13,000 to \$8,000. In 2016, Valley's current accounts receivable were significantly lower due to seasonal differences and credits given to residential customers which caused its 90-day in arrears to be 12.8% of accounts receivable. In 2017, Wellsboro's arrears over 90 days increased as a result of two commercial businesses filing for bankruptcy. Otherwise, Wellsboro's customer arrears over 90 days maintained near 2% for the period reviewed.

The auditors reviewed additional customer service performance data for the years 2015 through 2018 including, but not limited to: call center performance (calls answered, average call response, call abandonment); meters not read in 6 or 12 months; terminations; payment arrangement requests; payment types; and budget billing. The information provided by the C&T companies was deemed satisfactory and did not need further investigation.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit IX – 3**  
**C&T Companies**  
**Average Monthly Customer Arrearages**  
**For the Years 2015 through 2018**

		2015	2016	2017	2018
<b>Citizens'</b>	Current	\$1,449,047	\$1,310,513	\$1,301,385	\$1,341,657
	30-60 days	98,313	110,110	115,338	123,981
	60-90 days	28,544	21,589	25,955	29,503
	> 90 days	9,523	7,089	5,640	7,847
	% > 90 days	<b>0.6%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.5%</b>
<b>Wellsboro</b>	Current	\$943,889	\$910,119	\$1,021,352	\$973,821
	30-60 days	75,336	76,067	99,898	88,228
	60-90 days	26,837	26,160	33,002	24,249
	> 90 days	23,241	21,267	80,514	23,692
	% > 90 days	<b>2.2%</b>	<b>2.1%</b>	<b>6.5%</b>	<b>2.1%</b>
<b>Valley</b>	Current	\$394,203	\$43,551	\$272,784	\$347,955
	30-60 days	34,820	36,257	48,285	45,202
	60-90 days	12,139	8,977	10,356	10,954
	> 90 days	13,045	13,058	10,578	8,424
	% > 90 days	<b>2.9%</b>	<b>12.8%</b>	<b>3.1%</b>	<b>2.0%</b>

Source: Data Request CS-10, CS-11 and Auditor Analysis

**Findings and Conclusions**

Our examination of the Customer Service function focused primarily on a review of the C&T Companies' policies and procedures, performance measure and levels, customer information systems, customer satisfaction and complaints, meter reading, and customer account data. Based on our review, no evidence came to our attention that would lead the audit staff to conclude that the Customer Service functions were not being addressed adequately.

**Recommendations**

None



## X. EMERGENCY PREPAREDNESS

### Background

Public Utility Commission (PUC or Commission) regulations at 52 Pa. Code § 101 (Chapter 101) require jurisdictional utilities to develop and maintain written physical security, cybersecurity, emergency response, and business continuity plans to protect infrastructure within the Commonwealth of Pennsylvania and ensure safe, continuous and reliable utility service which is effective as of June 2005. A jurisdictional utility is required to establish these “emergency preparedness” plans and annually file a Self-Certification Form to the Commission documenting compliance with Chapter 101. This form is available on the PUC website and is comprised of the following questions as shown in Exhibit X-1.

### Exhibit X - 1 Pennsylvania Public Utility Commission Public Utility Security Planning and Readiness Self Certification Form

Item No.	Classification	Response (Yes–No–N/A)
1	Does your company have a physical security plan?	
2	Has your physical security plan been reviewed in the last year and updated as needed?	
3	Is your physical security plan tested annually?	
4	Does your company have a cyber-security plan?	
5	Has your cyber security plan been reviewed in the last year and updated as needed?	
6	Is your cyber security plan tested annually?	
7	Does your company have an emergency response plan?	
8	Has your emergency response plan been reviewed in the last year and updated as needed?	
9	Is your emergency response plan tested annually?	
10	Does your company have a business continuity plan?	
11	Does your business continuity plan have a section or annex addressing pandemics?	
12	Has your business continuity plan been reviewed in the last year and updated as needed?	
13	Is your business continuity plan tested annually?	

Source: Public Utility Security Planning and Readiness Self-Certification Form, as available on the PUC website at [http://www.puc.state.pa.us/general/onlineforms/pdf/Physical\\_Cyber\\_Security\\_Form.pdf](http://www.puc.state.pa.us/general/onlineforms/pdf/Physical_Cyber_Security_Form.pdf).

Due to the sensitive nature of the information reviewed, any specific information is not revealed in this report but rather the generalities of the information reviewed are summarized below.

The auditors reviewed the most recent (i.e., 2018) Self-Certification Forms submitted by Citizens' Electric Company of Lewisburg (Citizens'), Valley Energy, Inc. (Valley) and Wellsboro Electric Company (Wellsboro) (collectively referred to as the C&T companies) during fieldwork to determine the status of their responses. The auditors' examination of the C&T companies' emergency preparedness included a review of the physical security plans, cybersecurity plans, emergency response plans, business continuity plans, and associated manuals and security measures. All the

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

emergency preparedness plans, and related manuals were deemed complete and appropriate. The auditors also performed inspections at a sample of the companies' facilities including the utilities' headquarters and remote field locations. Additionally, the auditors reviewed policies, procedures and general practices related to physical and cyber security.

The C&T companies test their Physical Security, Cyber Security, Emergency Operations and Business Continuity Plans at least annually, and in some instances, multiple times per year. A review is completed to ensure each plan has been tested, results of testing have been evaluated, and the necessary corrective measures have been taken. The plans are updated following the testing and/or review of each individual plan. The individuals and their department(s) from the C&T companies or from C&T Enterprises, Inc. (C&T) assigned to each plan are as follows:

- Physical Security Plan – Director of Engineering & Operations (Citizens'), Chief Executive Officer (Valley), Chief Operations Officer (Wellsboro)
- Cyber Security Plan – Chief Information Officer (C&T)
- Emergency Response Plan – Director of Engineering & Operations (Citizens'), Chief Executive Officer (Valley), Chief Operations Officer (Wellsboro), Manager of Call Center Operations (C&T)
- Business Continuity Plan – Director of Engineering & Operations (Citizens'), Chief Executive Officer (Valley), Chief Operations Officer (Wellsboro), Chief Information Officer (C&T), Manager of Call Center Operations (C&T)

Although the information technology (IT) and cybersecurity functions reside with C&T, the IT department also provides IT and after-hour call center services (see Chapter IX – Customer Service) to Claverack Rural Electric Cooperative, Inc. (Claverack) and Tri-County Rural Electric Cooperative, Inc. (Tri-County). For more information on the relationships between Claverack, Tri-County and C&T, please refer to Chapter II – Background.

### **Findings and Conclusions**

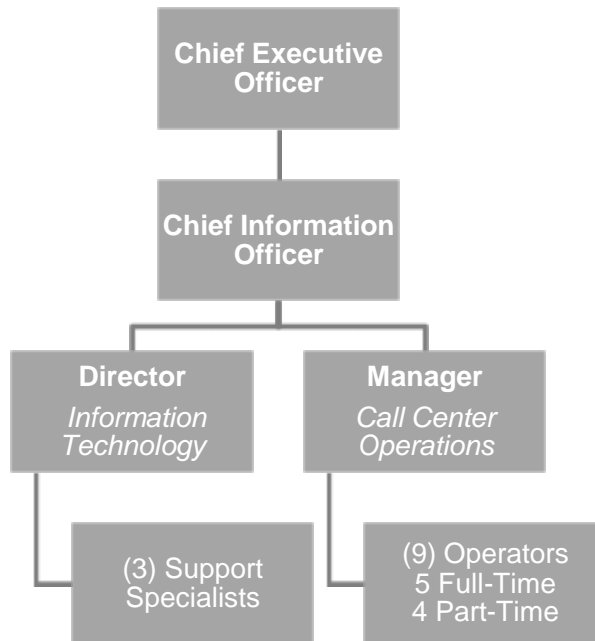
Our examination of Emergency Preparedness included a review of the physical security plan, cybersecurity plan, emergency response plan, business continuity plan, vulnerability assessments and all associated security measures. Based on our review of the companies' emergency preparedness efforts, the companies should initiate or devote additional efforts to improving the efficiency and effectiveness of its emergency preparedness function by addressing the following:

- 1. Cybersecurity personnel resources have not been dedicated to the C&T companies.**

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

As previously mentioned, C&T provides IT services, including cybersecurity, to the C&T companies, and its non-regulated owners Claverack and Tri-County. The C&T IT staff consists of a Chief Information Officer (CIO) with two direct reports; the Director of IT and the Manager of Call Center Operations. The Director of IT has a total of three support specialists; each support specialist and the Director are located at a C&T company (excluding Citizens'), Claverack and Tri-County. The organizational chart for C&T IT department can be seen in Exhibit X-2. In general, the IT department is responsible for hardware and software support, network infrastructure and application management. Additional responsibilities include cybersecurity and network access monitoring.

**Exhibit X – 2**  
**C&T Enterprises, Inc.**  
**Information Technology Department**



Source: Data Request EM-24

C&T addresses cybersecurity as a serious matter and has several applications and safeguards in place, however the IT department does not have an identified position dedicated to cybersecurity practices. C&T utilizes both internal resources as well as contractors and third-party applications to ensure their network infrastructure and data are protected from outside threats. The C&T companies including Claverack and Tri-County would benefit from implementation of a cybersecurity focused position to complement their current IT staff. An internal cybersecurity focus would further enhance the established cybersecurity program and provide additional security to each company's assets.

**Recommendations**

1. **Develop a business case to assess the options to create a C&T position to oversee the cybersecurity function for the C&T Companies.**

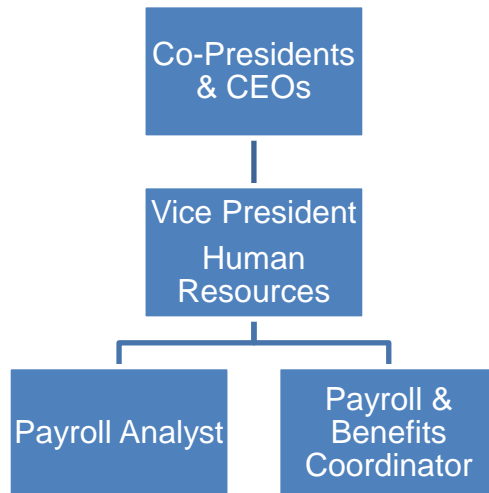
## XI. HUMAN RESOURCES

### Background

As stated in Chapter II – Background, Citizens' Electric Company of Lewisburg (Citizens'), Valley Energy, Inc. (Valley), and Wellsboro Electric Company (Wellsboro) (collectively referred to as the C&T Companies) are public utilities subject to regulation by the Pennsylvania Public Utility Commission (PUC or Commission). All three companies are 100% owned by C&T Enterprises, Inc. (C&T). C&T is a for-profit subsidiary of two rural non-profit electric cooperatives with each having 50% ownership; Claverack Rural Electric Cooperative, Inc. (Claverack) and Tri-County Rural Electric Cooperative, Inc. (Tri-County).

Human resource functions for the C&T companies are performed through C&T by the Vice President of Human Resources whose organizational reporting structure is displayed in Exhibit XI-1. This includes recruitment and hiring, employee benefits, compensation, and training and development. The Vice President of Human Resources reports directly to the Co-Presidents and CEOs of C&T. Additionally, a Payroll Analyst and a Payroll and Benefits Coordinator report to the Vice President of Human Resources. C&T also performs human resource functions on behalf of Claverack and Tri-County as well. The President and CEO of each C&T company also assist with human resource matters at the distribution company level. This includes responsibilities such as employee evaluations, discipline, and promotion.

**Exhibit XI – 1**  
**C&T Enterprises, Inc.**  
**Human Resources Organization Chart**  
**As of July 2019**



Source: Data Request EM-3

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

C&T does not have a formal human resource information system (HRIS). This is due to the relatively small combined size of C&T, the C&T companies, and Claverack and Tri-County as compared to other natural gas and electric distribution companies. The cost to purchase and maintain an HRIS would likely not be justified for the approximate 175 combined employees that are served by the Human Resources department. C&T utilizes a combination of a National Information Solutions Cooperative (NISC) system for payroll and various other programs (e.g., Microsoft Excel, etc.) for traditional HRIS needs.

The Human Resources department is provided with assistance and resources through C&T's membership with the National Rural Electric Cooperative Association (NRECA). NRECA is a national service organization which represents more than 900 consumer-owned, not-for-profit electric cooperatives, public power districts, and public utility districts across the country. Through NRECA, C&T is better able to provide competitive benefits and retirement options for its employees. This includes medical, prescription, vision, dental, and various group insurance products (e.g., life, short- and long-term disability insurance, etc.). Through NRECA, C&T is also able to provide competitive pensions. There are two different pension plans at the company; one for the C&T employees and the other for the Wellsboro union employees.

In addition to providing benefits, NRECA also provides C&T with Human Resource information services. NRECA provides C&T with compensation surveys which provide minimum, middle, and maximum salary industry measures and benefits information for positions throughout the distribution companies. Additionally, C&T utilizes outside consulting firms approximately every ten years to assist with wage and salary reviews. An outside consulting firm study was last conducted in 2011.

Safety related functions for the C&T Companies are performed through C&T by the Vice President of Safety and Compliance who directly reports to the Co-Presidents and CEOs as displayed in Exhibit XI-2. This includes reporting, training, accident investigations, training schedules, recommended practices, and safety evaluations. Safety responsibilities are also assumed in part by the President and CEO of each C&T company as well (similar to how the previously described human resource functions were assumed in part by these positions). C&T maintains two comprehensive safety manuals. The electric safety manual is utilized by Citizens' and Wellsboro (both companies use the same manual) and the natural gas safety manual is utilized by Valley.

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**Exhibit XI – 2  
C&T Enterprises, Inc.  
Safety and Compliance Organization Chart  
As of July 2019**



Source: Data Request EM-3

The auditors examined all reportable OSHA incidents at the C&T companies from 2014 to March 2019. There have been no serious OSHA recordable incidents at any of the C&T companies for this period. All incidents were minor slips/falls or sprains/strains. In fact, there have been no OSHA reportable incidents at all for Citizens' in this time period examined. The safety statistics for the C&T companies are displayed in Exhibit XI-3.

**Exhibit XI – 3  
Citizens' Electric Company of Lewisburg  
Valley Energy, Inc.  
Wellsboro Electric Company  
OSHA Reportable and Lost Time / Days Away and Restricted Rates  
As of March 2019**

Citizens'	2014	2015	2016	2017	2018	As of March, 2019
OSHA Recordable Accidents	0	0	0	0	0	0
Lost Time Accidents	0	0	0	0	0	0
Days Lost	0	0	0	0	0	0
Wellsboro	2014	2015	2016	2017	2018	As of March, 2019
OSHA Recordable Accidents	3	0	2	0	1	0
Lost Time Accidents	2	0	2	0	1	0
Days Lost	100	0	204	0	6	0
Valley	2014	2015	2016	2017	2018	As of March, 2019
OSHA Recordable Accidents	1	2	2	1	0	3
Lost Time Accidents	1	1	1	1	0	1
Days Lost	25	6	1	1	0	48

Source: Data Requests HR-19 and HR-29

## **Findings and Conclusions**

Our examination of the human resources function included a review of assigned responsibilities, policies and procedures, HRIS, training and employee development, compensation and benefits, diversity programs, and safety initiatives. Based on our review, C&T should initiate or devote additional effort to improving the efficiency and/or effectiveness of the human resources function by addressing the following:

**1. Wellsboro Electric Company has not filed PUC diversity reports for several years and does not have formal diversity and MWDBE goals and procedures.**

Under 52 Pa. Code § 69.809, major jurisdictional utility companies are encouraged to file an annual report describing their diversity program activity for the prior year. Per the March 1997 Guidelines for Annual PUC Diversity Filings, this is to include a description of minority/women/persons with disabilities-owned business enterprise (MWDBE) program activities engaged in during the previous calendar year (both internal and external activities).

As part of the management audit review, the auditor reviewed each company's 2016 to 2018 annual diversity filings with the Commission. Citizens' and Valley provided complete and timely annual diversity reports to the Commission. Wellsboro, however, has not provided annual diversity reports for this time period. Partially because of this, Wellsboro does not have active established workplace diversity and MWDBE goals that would normally be monitored in the annual diversity filings. Wellsboro explained that there was a vacancy in upper management right before this period and the lack of annual diversity filings was due to an oversight. Wellsboro was preparing diversity and MWDBE goals and procedures to properly prepare and provide annual diversity filings to the Commission as of the end of audit fieldwork in July 2019.

## **Recommendation**

**1. Establish minority employee and MWDBE vendor utilization goals and submit annual diversity reports to the PUC for Wellsboro Electric Company.**

Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

## **XII. ACKNOWLEDGEMENTS**

We wish to express our appreciation for the cooperation and assistance provided by the officers and staff of C&T Enterprises, Citizens' Electric Company of Lewisburg, Wellsboro Electric Company, and Valley Energy, Inc. during this Management and Operations Audit.

This audit was conducted by Tim Kerestes, Melissa Lawrence, and Eric McKeever of the Management Audit Staff of the PUC Bureau of Audits.



Citizens' Electric Company of Lewisburg  
Wellsboro Electric Company  
Valley Energy, Inc.

**XIII. APPENDICES**

- Appendix A      Citizens' Electric Company of Lewisburg  
                         Financial and Operating Data and Statistics
- Appendix B      Citizens' Electric Company of Lewisburg  
                         Balance Sheet
- Appendix C      Wellsboro Electric Company  
                         Financial and Operating Data and Statistics
- Appendix D      Wellsboro Electric Company  
                         Balance Sheet
- Appendix E      Valley Energy, Inc.  
                         Financial and Operating Data and Statistics

**Citizens Electric Company  
Financial and Operating Data and Statistics**

	2014	2015	2016	2017	2018	Compound Growth
<b>Plant In Service</b>						
Land and Land Rights	-	-	-	-	-	NM
Structures and Improvements	-	-	-	-	-	NM
Station Equipment	-	-	-	-	-	NM
Towers and Fixtures	-	-	-	-	-	NM
Poles and Fixtures	-	-	-	-	-	NM
Overhead Conductors and Devices	-	-	-	-	-	NM
Underground Conduit	-	-	-	-	-	NM
Underground Conductors and Devices	-	-	-	-	-	NM
Roads and Trails	-	-	-	-	-	NM
Asset Retirement Costs for Transmission Plant	-	-	-	-	-	NM
<b>Total Transmission Plant</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>NM</b>
Land and Land Rights	\$13,791	\$14,061	\$14,061	\$14,061	14,291	0.9%
Structures and Improvements	-	-	-	-	-	NM
Station Equipment	\$760,757	\$760,757	\$792,280	\$792,280	792,280	1.0%
Poles, Towers, and Fixtures	\$3,156,307	\$3,254,322	\$3,391,737	\$3,470,242	3,574,265	3.2%
Overhead Conductors and Devices	\$4,997,239	\$5,304,293	\$5,681,466	\$5,892,060	6,368,882	6.3%
Underground Conduit	-	-	-	-	-	NM
Underground Conductors and Devices	\$2,259,228	\$2,447,381	\$2,608,309	\$2,758,774	2,945,646	6.9%
Line Transformers	\$2,320,039	\$2,387,522	\$2,491,594	\$2,544,596	2,587,731	2.8%
Services	\$2,705,052	\$2,803,424	\$2,923,042	\$3,085,416	3,234,601	4.6%
Meters	\$1,363,458	\$1,398,977	\$1,428,962	\$1,451,760	1,419,770	1.0%
Street Lighting and Signal Systems	\$523,415	\$538,106	\$549,602	\$554,688	560,892	1.7%
<b>Total Distribution Plant</b>	<b>\$18,099,286</b>	<b>\$18,908,843</b>	<b>\$19,881,053</b>	<b>\$20,563,877</b>	<b>\$21,498,358</b>	<b>4.4%</b>
<b>Total Plant In Service</b>	<b>\$18,099,286</b>	<b>\$18,908,843</b>	<b>\$19,881,053</b>	<b>\$20,563,877</b>	<b>\$21,498,358</b>	<b>4.4%</b>
<b>Total Materials and Supplies</b>						
Assigned - Operations and Maintenance	-	-	-	-	-	NM
Transmission Plant (estimated)	-	-	-	-	-	NM
Distribution Plant (estimated)	\$187,013	\$163,027	\$159,717	\$168,281	\$178,276	-1.2%
<b>Operating Revenues</b>						
<b>Sales of Electricity</b>						
Residential Sales	\$10,089,184	\$9,501,080	\$9,090,910	\$8,469,857	\$9,187,689	-2.3%
Commercial Sales	\$3,398,670	\$3,043,104	\$2,944,743	\$2,711,911	\$2,759,807	-5.1%
Industrial Sales	\$4,339,532	\$2,134,190	\$2,010,453	\$1,828,045	\$1,901,116	-18.6%
Public Street and Highway Lighting Sales	\$24,434	\$24,249	\$23,334	\$125,464	\$126,984	51.0%
<b>Total Sales to Ultimate Customers</b>	<b>\$17,851,820</b>	<b>\$14,702,623</b>	<b>\$14,069,440</b>	<b>\$13,135,277</b>	<b>\$13,975,596</b>	<b>-5.9%</b>
Unmetered Sales	\$102,114	\$100,733	\$97,630	-	-	-100.0%
<b>Total Sales of Electricity</b>	<b>\$17,953,934</b>	<b>\$14,803,356</b>	<b>\$14,167,070</b>	<b>\$13,135,277</b>	<b>\$13,975,596</b>	<b>-6.1%</b>
Other Revenues	\$80,298	\$66,011	\$62,210	\$66,284	\$68,566	-3.9%
<b>Total Revenues Net Provisions</b>	<b>\$18,034,232</b>	<b>\$14,869,367</b>	<b>\$14,229,280</b>	<b>\$13,201,561</b>	<b>\$14,044,162</b>	<b>-6.1%</b>
<b>Megawatt Hours Sold</b>						
<b>Sales of Electricity</b>						
Residential Sales	88,335	86,887	83,010	81,630	90,568	0.6%
Commercial Sales	29,440	30,019	29,877	29,979	31,359	1.6%
Industrial Sales	53,974	57,224	58,390	54,097	55,547	0.7%
Public Street and Highway Lighting Sales	116	115	113	576	533	46.4%
<b>Total Sales to Ultimate Customers</b>	<b>171,864</b>	<b>174,246</b>	<b>171,390</b>	<b>166,282</b>	<b>178,007</b>	<b>0.9%</b>
Unmetered Sales	484	478	474	-	-	-100.0%
<b>Total Sales of Electricity</b>	<b>172,349</b>	<b>174,724</b>	<b>171,864</b>	<b>166,282</b>	<b>178,007</b>	<b>0.8%</b>
<b>Average Number of Customers Per Month</b>						
<b>Sales of Electricity</b>						
Residential Sales	5,734	5,752	5,775	5,836	5,877	0.6%
Commercial Sales	1,078	1,088	1,099	1,101	1,100	0.5%
Industrial Sales	40	38	38	37	37	-1.9%
Public Street and Highway Lighting Sales	12	12	12	12	12	0.0%
<b>Total Sales to Ultimate Customers</b>	<b>6,864</b>	<b>6,890</b>	<b>6,924</b>	<b>6,986</b>	<b>7,026</b>	<b>0.6%</b>
Unmetered Sales	22	22	22	-	-	-100.0%
<b>Total Sales of Electricity</b>	<b>6,886</b>	<b>6,912</b>	<b>6,946</b>	<b>6,986</b>	<b>7,026</b>	<b>0.5%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Citizens Electric Company  
Financial and Operating Data and Statistics**

	2014	2015	2016	2017	2018	Compound Growth
<b>Operation and Maintenance Expenses</b>						
<b>Transmission</b>						
<b>Total Operation</b>						NM
Maintenance Supervision and Engineering	-	-	-	-	-	NM
Maintenance of Structures	-	-	-	-	-	NM
Maintenance of Station Equipment	-	-	-	-	-	NM
Maintenance of Overhead Lines	-	-	-	-	-	NM
Maintenance of Underground Lines	-	-	-	-	-	NM
Maintenance of Misc. Transmission Plant	-	-	-	-	-	NM
<b>Total Maintenance</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>NM</b>
<b>Total Transmission O&amp;M Expenses</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>NM</b>
<b>Distribution</b>						
<b>Total Operation</b>	<b>\$636,484</b>	<b>\$675,969</b>	<b>\$676,989</b>	<b>\$648,685</b>	<b>\$708,061</b>	<b>2.7%</b>
Maintenance Supervision/Engineering	-	-	-	-	-	NM
Maintenance of Structures	-	-	-	-	-	NM
Maintenance of Station Equipment	\$13,286	\$2,301	\$18,308	\$14,075	\$10,099	-6.6%
Maintenance of Overhead Lines	\$384,733	\$408,362	\$403,872	\$498,844	\$401,473	1.1%
Maintenance of Underground Lines	\$8,556	\$562	\$2,535	\$3,726	\$16,522	17.9%
Maintenance of Line Transformers	\$12,229	\$15,677	\$12,097	\$12,625	\$10,769	-3.1%
Maintenance of Street Lighting/Signal Systems	\$5,535	\$4,821	\$1,542	\$2,497	\$11,973	21.3%
Maintenance of Meters	\$179	-	-	\$33	1,316	64.7%
Maintenance of Misc. Distribution Plant	-	-	-	-	-	NM
<b>Total Maintenance</b>	<b>\$424,518</b>	<b>\$431,723</b>	<b>\$438,354</b>	<b>\$531,800</b>	<b>\$452,152</b>	<b>1.6%</b>
<b>Total Distribution O&amp;M Expenses</b>	<b>\$1,061,002</b>	<b>\$1,107,692</b>	<b>\$1,115,343</b>	<b>\$1,180,485</b>	<b>\$1,160,213</b>	<b>2.3%</b>
<b>Total Transmission and Distribution Expenses</b>	<b>\$1,061,002</b>	<b>\$1,107,692</b>	<b>\$1,115,343</b>	<b>\$1,180,485</b>	<b>\$1,160,213</b>	<b>2.3%</b>
<b>Customer Service and Info. Expenses</b>						
Supervision	-	-	-	-	-	NM
Customer Assistance Expenses	\$929	-	-	-	-	-100.0%
Information and Instructional Expenses	-	-	-	-	-	NM
Misc Customer Service and Info. Expenses	-	-	-	-	-	NM
<b>Total Customer Service and Info. Expenses</b>	<b>\$929</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>-100.0%</b>
<b>Administrative and General Expenses</b>						
Administrative and General Salaries	\$547,497	\$563,135	\$590,270	\$584,877	\$595,872	2.1%
Office Supplies and Expenses	\$22,573	\$43,214	\$79,307	\$89,241	\$85,248	39.4%
Outside Services Employed	\$55,561	\$38,545	\$53,612	\$52,216	\$91,750	13.4%
Property Insurance	\$16,627	\$17,675	\$7,469	\$9,877	\$10,082	-11.8%
Injuries and Damages	\$28,576	\$27,913	\$31,292	\$29,756	\$26,510	-1.9%
Employee Pension and Benefits	\$10,766	\$20,946	\$10,749	\$2,855	\$29,513	28.7%
Regulatory Commission Expenses	\$8,474	-	-	\$46,388	61,907	64.4%
General Advertising Expenses	\$200	\$200	\$240	\$240	\$240	4.7%
Miscellaneous General Expenses	\$81,913	\$80,632	\$81,213	\$85,637	\$91,407	2.8%
Rent	-	-	-	-	-	NM
<b>Total Admin. And General Expenses</b>	<b>\$772,187</b>	<b>\$792,260</b>	<b>\$854,152</b>	<b>\$901,087</b>	<b>\$992,529</b>	<b>6.5%</b>
<b>Total Operation &amp; Maintenance Expenses</b>	<b>\$1,834,118</b>	<b>\$1,899,952</b>	<b>\$1,969,495</b>	<b>\$2,081,572</b>	<b>\$2,152,742</b>	<b>4.1%</b>
<b>Disposition of Energy (Megawatt Hours)</b>						
Sales to Ultimate Customers	171,864	174,246	171,390	166,282	178,007	0.9%
Unmetered Sales	484	478	474	-	-	-100.0%
Energy Used by Company	195	180	174	163	171	-3.3%
Total Energy Losses	4,721	8,800	8,347	9,824	9,746	19.9%
Energy Loss as a Percent of Total Available	2.7%	4.8%	4.6%	5.6%	5.2%	18.1%
<b>Total Energy Available</b>	<b>177,265</b>	<b>183,704</b>	<b>180,385</b>	<b>176,269</b>	<b>187,924</b>	<b>1.5%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Citizens Electric Company  
Balance Sheet**

**Appendix B  
Page 1 of 2**

BALANCE SHEET	2014	2015	2016	2017	2018	Compound Growth
<b>UTILITY PLANT</b>						
Utility Plant	\$24,412,793	\$25,613,898	\$26,656,636	\$27,375,168	\$28,388,549	3.8%
Construction Work in Progress	\$29,224	\$14,028	\$4,346	\$142,287	\$70,493	24.6%
<b>TOTAL UTILITY PLANT</b>	<b>\$24,442,017</b>	<b>\$25,627,926</b>	<b>\$26,660,982</b>	<b>\$27,517,455</b>	<b>\$28,459,042</b>	<b>3.9%</b>
Accum. Depreciation and Amortization	\$10,060,812	\$10,533,611	\$11,027,808	\$11,574,060	\$12,077,807	4.7%
<b>NET UTILITY PLANT</b>	<b>\$14,381,205</b>	<b>\$15,094,315</b>	<b>\$15,633,174</b>	<b>\$15,943,395</b>	<b>\$16,381,235</b>	<b>3.3%</b>
<b>OTHER PROPERTY AND INVESTMENTS</b>						
Nonutility Property	\$21,704	\$21,704	\$21,704	\$21,704	\$21,704	0.0%
Accum. Depreciation and Amortization	-	-	-	-	-	NM
Investments in Associated Companies	-	-	-	-	-	NM
Investment in Subsidiary Companies	-	-	-	-	-	NM
Noncurrent Portion of Allowances	-	-	-	-	-	NM
Other Investments	\$131,131	\$133,115	\$145,484	\$167,112	\$162,630	5.5%
Special Funds	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$152,835</b>	<b>\$154,819</b>	<b>\$167,188</b>	<b>\$188,816</b>	<b>\$184,334</b>	<b>4.8%</b>
<b>CURRENT AND ACCRUED ASSETS</b>						
Cash	\$544,862	\$298,822	\$381,024	\$445,384	\$450,680	-4.6%
Special Deposits	-	-	-	-	-	NM
Working Fund	\$300	\$300	\$300	\$300	\$300	0.0%
Temporary Cash Investments	-	-	-	-	-	NM
Notes Receivable	-	-	-	-	-	NM
Customer Accounts Receivable	\$798,616	\$714,778	\$868,196	\$853,603	\$906,886	3.2%
Other Accounts Receivable	\$1,645	\$16,888	\$12,015	\$2,667	\$0	-100.0%
Accum. for Uncollectible Accounts	(\$35,000)	(\$35,000)	(\$35,000)	(\$35,000)	(\$35,000)	0.0%
Notes Receivable from Assoc. Companies	-	-	-	-	-	NM
Accts Receivable from Assoc. Companies	\$91,238	\$91,780	\$90,700	\$90,700	\$90,700	-0.1%
Fuel Stock	-	-	-	-	-	NM
Fuel Stock Expenses Undistributed	-	-	-	-	-	NM
Residuals and Extracted Products	-	-	-	-	-	NM
Plant Materials and Operating Supplies	\$187,013	\$163,027	\$159,717	\$168,281	\$178,276	-1.2%
Merchandise	-	-	-	-	-	NM
Other Materials and Supplies	-	-	-	-	-	NM
Nuclear Materials Held for Sales	-	-	-	-	-	NM
Allowances	-	-	-	-	-	NM
Noncurrent Portion of Allowances	-	-	-	-	-	NM
Stores Expense Undistributed	-	-	-	-	-	NM
Gas Stored Underground-Current	-	-	-	-	-	NM
Liquefied Gas Stored and Held for Proc.	-	-	-	-	-	NM
Prepayments	-	-	-	-	-	NM
Advances for Gas	-	-	-	-	-	NM
Interest and Dividends Receivable	\$57,967	\$79,036	\$35,351	\$34,566	\$35,811	-11.3%
Rents Receivable	-	-	-	-	-	NM
Accrued Utility Revenues	\$846,894	\$724,414	\$981,166	\$983,145	\$830,004	0.0%
Miscellaneous Current and Accrued Assets	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$2,493,535</b>	<b>\$2,054,045</b>	<b>\$2,493,469</b>	<b>\$2,543,646</b>	<b>\$2,457,657</b>	<b>-0.4%</b>
<b>DEFERRED DEBITS</b>						
Unamortized Debt Expenses	-	-	-	-	-	NM
Extraordinary Property Losses	-	-	-	-	-	NM
Unrecovered Plant and Regulatory Study	-	-	-	-	-	NM
Other Regulatory Assets	\$1,232,178	\$759,226	\$813,239	\$513,448	\$284,402	-30.7%
Prelim. Survey and Investigation Charges	-	-	-	-	-	NM
Clearing Accounts	-	-	-	-	-	NM
Temporary Facilities	-	-	-	-	-	NM
Misc. Deferred Debits	-	\$527,993	\$761,354	\$507,466	\$368,794	NM
Def. Losses from Disposition of Plant	-	-	-	-	-	NM
Research, Devel. and Demonstration	-	-	-	-	-	NM
Unamortized Loss on Reacquired Debt	-	-	-	-	-	NM
Accum. Deferred Income Taxes	\$60,000	\$44,500	\$63,800	\$78,600	\$82,700	8.4%
<b>TOTALS</b>	<b>\$1,292,178</b>	<b>\$1,331,719</b>	<b>\$1,638,393</b>	<b>\$1,099,514</b>	<b>\$735,896</b>	<b>-13.1%</b>
<b>TOTAL ASSETS AND OTHER DEBITS</b>	<b>\$18,319,753</b>	<b>\$18,634,898</b>	<b>\$19,932,224</b>	<b>\$19,775,371</b>	<b>\$19,759,122</b>	<b>1.9%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Citizens Electric Company  
Balance Sheet**

<b>BALANCE SHEET</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Compound Growth</b>
<b>PROPRIETARY CAPITAL</b>						
Common Stock Issued	\$1,394,720	\$1,394,720	\$1,394,720	\$1,394,720	\$1,394,720	0.0%
Preferred Stock Issued	-	-	-	-	-	NM
Capital Stock Subscribed	-	-	-	-	-	NM
Stock Liability for Conversion	-	-	-	-	-	NM
Premium on Capital Stock	\$1,233,894	\$1,233,894	\$1,233,894	\$1,233,894	\$1,233,894	0.0%
Donations from Stockholders	-	-	-	-	-	NM
Gain on Required Capital Stock	-	-	-	-	-	NM
Other Paid-in Capital Stock	\$9,398	\$9,398	\$9,398	\$9,398	\$9,398	0.0%
Installments Received on Capital Stock	-	-	-	-	-	NM
Discount on Capital Stock	-	-	-	-	-	NM
Capital Stock Expense	(\$7,124)	(\$7,124)	(\$7,124)	(\$7,124)	(\$7,124)	0.0%
Retained Earnings	\$9,833,654	\$9,991,560	\$10,126,026	\$10,581,739	\$10,691,696	2.1%
Unappropriated Undistributed Earnings	-	-	-	-	-	NM
Reacquired Capital Stock	-	-	-	-	-	NM
Other	(\$376,830)	(\$376,830)	(\$376,830)	(\$376,830)	(\$376,830)	0.0%
<b>TOTALS</b>	<b>\$12,087,712</b>	<b>\$12,245,618</b>	<b>\$12,380,084</b>	<b>\$12,835,797</b>	<b>\$12,945,756</b>	<b>1.7%</b>
<b>LONG-TERM DEBT</b>						
Bonds	-	-	-	-	-	NM
Reacquired Bonds	-	-	-	-	-	NM
Advances from Associated Companies	\$1,602,239	\$1,443,444	\$1,277,991	\$2,290,808	\$2,080,684	6.8%
Other Long-Term Debt	-	-	-	-	-	NM
Unamortized Premium on Long-Term Debt	-	-	-	-	-	NM
Unamortized Discount on Long-Term Debt	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$1,602,239</b>	<b>\$1,443,444</b>	<b>\$1,277,991</b>	<b>\$2,290,808</b>	<b>\$2,080,684</b>	<b>6.8%</b>
<b>OTHER NONCURRENT LIABILITIES</b>						
Obligations Under Capital Leases-Noncurrent	\$285,465	\$185,161	\$255,398	\$219,356	\$218,702	-6.4%
Accum. Provision for Property Insurance	-	-	-	-	-	NM
Accum. Provision for Injuries and Damages	-	-	-	-	-	NM
Accum. Provision for Pensions and Benefits	\$954,419	\$966,043	\$1,027,605	\$874,353	\$842,392	-3.1%
Accum. Misc. Operating Provisions	\$162,769	\$227,053	-	-	-	-100.0%
Accum. Provision for Rate Refunds	-	-	-	-	-	NM
Long-Term Portion - Instrument Liabilities	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$1,402,653</b>	<b>\$1,378,257</b>	<b>\$1,283,003</b>	<b>\$1,093,709</b>	<b>\$1,061,094</b>	<b>-6.7%</b>
<b>CURRENT AND ACCRUED LIABILITIES</b>						
Notes Payable	-	\$500,000	\$1,600,000	\$600,000	\$800,000	NM
Accounts Payable	\$310,099	\$303,704	\$528,696	\$439,709	\$358,482	3.7%
Notes Payable to Associated Companies	-	-	-	-	-	NM
Account Payable to Associated Companies	-	-	-	-	-	NM
Customer Deposits	\$96,743	\$101,120	\$86,879	\$90,531	\$106,387	2.4%
Taxes Accrued	\$164,127	-	-	-	\$8,355	-52.5%
Interest Accrued	-	-	-	-	-	NM
Dividends Declared	-	-	-	-	-	NM
Matured Long-Term Debt	-	-	-	-	-	NM
Matured Interests	-	-	-	-	-	NM
Tax Collections Payable	-	-	-	-	-	NM
Misc. Current and Accrued Liabilities	\$782,095	\$630,955	\$865,088	\$868,456	\$810,594	0.9%
Obligations Under Capital Leases-Current	\$110,370	\$95,967	\$50,083	\$38,961	\$48,870	-18.4%
<b>TOTALS</b>	<b>\$1,463,434</b>	<b>\$1,631,746</b>	<b>\$3,130,746</b>	<b>\$2,037,657</b>	<b>\$2,132,688</b>	<b>9.9%</b>
<b>DEFERRED CREDITS</b>						
Customer Advances for Construction	\$43,515	\$160,833	-	-	-	-100.0%
Accum. Deferred Investments Tax Credits	-	-	-	-	-	NM
Def. Gains from Disposition of Utility Plant	-	-	-	-	-	NM
Other Deferred Credits	-	-	-	-	-	NM
Other Regulatory Liabilities	-	-	-	-	-	NM
Unamortized Gain on Reacquired Debt	-	-	-	-	-	NM
Accum. Deferred Income Taxes	\$1,720,200	1,775,000	1,860,400	\$1,517,400	\$1,538,900	-2.7%
<b>TOTALS</b>	<b>\$1,763,715</b>	<b>\$1,935,833</b>	<b>\$1,860,400</b>	<b>\$1,517,400</b>	<b>\$1,538,900</b>	<b>-3.4%</b>
<b>TOTAL LIABILITIES AND OTHER CREDITS</b>	<b>\$18,319,753</b>	<b>\$18,634,898</b>	<b>\$19,932,224</b>	<b>\$19,775,371</b>	<b>\$19,759,122</b>	<b>1.9%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Wellsboro Electric Company**  
**Financial and Operating Data and Statistics**

	2014	2015	2016	2017	2018	Compound Growth
<b>Plant In Service</b>						
Land and Land Rights	-	-	-	-	-	NM
Structures and Improvements	-	-	-	-	-	NM
Station Equipment	-	-	-	-	-	NM
Towers and Fixtures	-	-	-	-	-	NM
Poles and Fixtures	-	-	-	-	-	NM
Overhead Conductors and Devices	-	-	-	-	-	NM
Underground Conduit	-	-	-	-	-	NM
Underground Conductors and Devices	-	-	-	-	-	NM
Roads and Trails	-	-	-	-	-	NM
Asset Retirement Costs for Transmission Plant	-	-	-	-	-	NM
<b>Total Transmission Plant</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>NM</b>
Land and Land Rights	\$178,335	\$178,335	\$178,335	\$178,335	178,335	0.0%
Structures and Improvements	\$109,168	\$109,168	\$109,168	\$109,168	109,168	0.0%
Station Equipment	\$3,859,629	\$3,813,898	\$3,813,898	\$3,746,524	3,704,370	-1.0%
Poles, Towers, and Fixtures	\$6,784,119	\$7,443,668	\$7,939,019	\$8,539,303	9,112,907	7.7%
Overhead Conductors and Devices	\$2,757,930	\$2,840,071	\$2,965,976	\$3,167,345	3,339,344	4.9%
Underground Conduit	\$26,899	\$26,899	\$26,899	\$26,899	26,899	0.0%
Underground Conductors and Devices	\$731,956	\$751,544	\$771,150	\$893,168	893,660	5.1%
Line Transformers	\$2,121,560	\$2,167,750	\$2,267,647	\$2,348,331	2,464,696	3.8%
Services	\$1,616,322	\$1,725,013	\$1,823,740	\$1,891,455	1,944,398	4.7%
Meters	\$870,663	\$855,354	\$855,862	\$900,538	1,090,262	5.8%
Installations on Customers' Premises	\$202,170	\$211,067	\$215,932	\$231,928	234,654	3.8%
Street Lighting and Signal Systems	\$55,035	\$62,116	\$64,704	\$70,090	72,732	7.2%
<b>Total Distribution Plant</b>	<b>\$19,313,786</b>	<b>\$20,184,883</b>	<b>\$21,032,330</b>	<b>\$22,103,084</b>	<b>\$23,171,425</b>	<b>4.7%</b>
<b>Total Plant In Service</b>	<b>\$19,313,786</b>	<b>\$20,184,883</b>	<b>\$21,032,330</b>	<b>\$22,103,084</b>	<b>\$23,171,425</b>	<b>4.7%</b>
<b>Total Materials and Supplies</b>						
Assigned - Operations and Maintenance						
Transmission Plant (estimated)	-	-	-	-	-	NM
Distribution Plant (estimated)	\$227,217	\$245,607	\$264,583	\$230,003	\$218,305	-1.0%
<b>Operating Revenues</b>						
<b>Sales of Electricity</b>						
Residential Sales	\$6,176,601	\$5,834,829	\$5,462,111	\$5,939,290	\$6,255,693	0.3%
Commercial Sales	\$4,530,962	\$4,260,158	\$3,883,926	\$3,884,609	\$3,718,004	-4.8%
Industrial Sales	\$4,688,187	\$4,340,397	\$3,106,101	\$1,816,474	\$1,331,037	-27.0%
Public Street and Highway Lighting Sales	\$40,238	\$39,394	\$37,842	\$40,784	\$40,603	0.2%
<b>Total Sales to Ultimate Customers</b>	<b>\$15,435,988</b>	<b>\$14,474,778</b>	<b>\$12,489,980</b>	<b>\$11,681,157</b>	<b>\$11,345,337</b>	<b>-7.4%</b>
Sales for Resale	\$14,149	\$15,872	\$15,126	\$15,722	\$16,058	3.2%
<b>Total Sales of Electricity</b>	<b>\$15,450,137</b>	<b>\$14,490,650</b>	<b>\$12,505,106</b>	<b>\$11,696,879</b>	<b>\$11,361,395</b>	<b>-7.4%</b>
Other Revenues	\$638,722	(\$38,146)	\$213,398	\$599,436	\$483,530	-6.7%
<b>Total Revenues Net Provisions</b>	<b>\$16,088,859</b>	<b>\$14,452,504</b>	<b>\$12,718,504</b>	<b>\$12,296,315</b>	<b>\$11,844,925</b>	<b>-7.4%</b>
<b>Megawatt Hours Sold</b>						
<b>Sales of Electricity</b>						
Residential Sales	44,003	43,905	43,193	42,426	44,775	0.4%
Commercial Sales	32,482	32,630	32,525	32,221	32,920	0.3%
Industrial Sales	43,596	43,734	42,060	30,050	28,120	-10.4%
Public Street and Highway Lighting Sales	221	219	213	232	238	1.9%
<b>Total Sales to Ultimate Customers</b>	<b>120,301</b>	<b>120,488</b>	<b>117,991</b>	<b>104,929</b>	<b>106,053</b>	<b>-3.1%</b>
Sales for Resale	98	115	115	107	108	2.6%
<b>Total Sales of Electricity</b>	<b>120,399</b>	<b>120,604</b>	<b>118,106</b>	<b>105,036</b>	<b>106,161</b>	<b>-3.1%</b>
<b>Average Number of Customers Per Month</b>						
<b>Sales of Electricity</b>						
Residential Sales	5,078	5,090	5,106	5,112	5,118	0.2%
Commercial Sales	1,169	1,177	1,184	1,191	1,199	0.6%
Industrial Sales	14	14	14	13	13	-1.8%
Public Street and Highway Lighting Sales	1	1	1	1	1	0.0%
<b>Total Sales to Ultimate Customers</b>	<b>6,262</b>	<b>6,282</b>	<b>6,305</b>	<b>6,317</b>	<b>6,331</b>	<b>0.3%</b>
Sales for Resale	4	4	4	4	4	0.0%
<b>Total Sales of Electricity</b>	<b>6,266</b>	<b>6,286</b>	<b>6,309</b>	<b>6,321</b>	<b>6,335</b>	<b>0.3%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Wellsboro Electric Company**  
**Financial and Operating Data and Statistics**

	2014	2015	2016	2017	2018	Compound Growth
<b>Operation and Maintenance Expenses</b>						
<b>Transmission</b>						
<b>Total Operation</b>						NM
Maintenance Supervision and Engineering	-	-	-	-	-	NM
Maintenance of Structures	-	-	-	-	-	NM
Maintenance of Station Equipment	-	-	-	-	-	NM
Maintenance of Overhead Lines	-	-	-	-	-	NM
Maintenance of Underground Lines	-	-	-	-	-	NM
Maintenance of Misc. Transmission Plant	-	-	-	-	-	NM
<b>Total Maintenance</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>NM</b>
<b>Total Transmission O&amp;M Expenses</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>NM</b>
<b>Distribution</b>						
<b>Total Operation</b>	<b>\$262,162</b>	<b>\$203,975</b>	<b>\$217,429</b>	<b>\$249,598</b>	<b>\$411,216</b>	<b>11.9%</b>
Maintenance Supervision/Engineering	\$27,649	\$26,753	\$32,134	\$3,651	8,006	-26.6%
Maintenance of Structures	-	\$43	-	-	-	NM
Maintenance of Station Equipment	\$8,607	\$8,063	\$13,750	\$48,425	\$9,970	3.7%
Maintenance of Overhead Lines	\$433,759	\$445,108	\$490,639	\$563,908	\$500,929	3.7%
Maintenance of Underground Lines	\$16,437	\$14,181	\$36,396	\$45,326	\$27,351	13.6%
Maintenance of Line Transformers	\$16,838	\$23,456	\$15,316	\$18,897	\$13,397	-5.6%
Maintenance of Street Lighting/Signal Systems	\$782	\$173	-	\$413	\$0	-100.0%
Maintenance of Meters	\$37,706	\$29,104	\$43,711	\$36,137	41,925	2.7%
Maintenance of Misc. Distribution Plant	-	-	-	-	-	NM
<b>Total Maintenance</b>	<b>\$541,778</b>	<b>\$546,881</b>	<b>\$631,946</b>	<b>\$716,757</b>	<b>\$601,578</b>	<b>2.7%</b>
<b>Total Distribution O&amp;M Expenses</b>	<b>\$803,940</b>	<b>\$750,856</b>	<b>\$849,375</b>	<b>\$966,355</b>	<b>\$1,012,794</b>	<b>5.9%</b>
<b>Total Transmission and Distribution Expenses</b>	<b>\$803,940</b>	<b>\$750,856</b>	<b>\$849,375</b>	<b>\$966,355</b>	<b>\$1,012,794</b>	<b>5.9%</b>
<b>Customer Service and Info. Expenses</b>						
Supervision	-	-	-	-	-	NM
Customer Assistance Expenses	\$1,599	\$1,880	\$4,733	\$3,518	1,481	-1.9%
Information and Instructional Expenses	\$587	\$800	\$1,128	\$885	800	0.0%
Misc Customer Service and Info. Expenses	-	-	-	-	-	NM
<b>Total Customer Service and Info. Expenses</b>	<b>\$2,186</b>	<b>\$2,680</b>	<b>\$5,861</b>	<b>\$4,403</b>	<b>\$2,281</b>	<b>1.1%</b>
<b>Administrative and General Expenses</b>						
Administrative and General Salaries	\$552,067	\$531,593	\$558,097	\$635,855	\$477,001	-3.6%
Office Supplies and Expenses	(\$3,765)	\$7,184	\$26,542	\$45,365	\$67,277	NM
Outside Services Employed	\$72,971	\$105,185	\$91,835	\$92,367	\$117,915	12.7%
Property Insurance	\$62,680	\$62,968	\$64,142	\$61,779	\$59,177	-1.4%
Injuries and Damages	-	-	-	-	-	NM
Employee Pension and Benefits	-	-	-	-	-	NM
Regulatory Commission Expenses	\$50,720	58,089	50,836	\$94,679	104,215	19.7%
General Advertising Expenses	-	-	-	-	-	NM
Miscellaneous General Expenses	\$73,901	\$76,760	\$128,238	\$97,824	\$94,236	6.3%
Rent	\$2,514	\$2,391	\$2,391	\$3,285	2,391	-1.2%
<b>Total Admin. And General Expenses</b>	<b>\$811,088</b>	<b>\$844,170</b>	<b>\$922,081</b>	<b>\$1,031,154</b>	<b>\$922,212</b>	<b>3.3%</b>
<b>Total Operation &amp; Maintenance Expenses</b>	<b>\$1,617,214</b>	<b>\$1,597,706</b>	<b>\$1,777,317</b>	<b>\$2,001,912</b>	<b>\$1,937,287</b>	<b>4.6%</b>
<b>Disposition of Energy (Megawatt Hours)</b>						
Sales to Ultimate Customers	120,301	120,488	117,991	104,929	106,053	-3.1%
Sales for Resale	98	115	115	107	108	2.6%
Energy Used by Company	290	294	259	222	222	-6.5%
Total Energy Losses	12,949	8,885	12,293	7,511	7,020	-14.2%
Energy Loss as a Percent of Total Available	9.7%	6.8%	9.4%	6.7%	6.2%	-10.6%
<b>Total Energy Available</b>	<b>133,639</b>	<b>129,783</b>	<b>130,659</b>	<b>112,769</b>	<b>113,404</b>	<b>-4.0%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Wellsboro Electric Company  
Balance Sheet**

**Appendix D  
Page 1 of 2**

BALANCE SHEET	2014	2015	2016	2017	2018	Compound Growth
<b>UTILITY PLANT</b>						
Utility Plant	\$21,915,431	\$23,167,620	\$24,151,368	\$25,231,464	\$26,496,716	4.9%
Construction Work in Progress	\$41,437	\$59,267	\$23,148	\$19,047	\$70,098	14.0%
<b>TOTAL UTILITY PLANT</b>	<b>\$21,956,868</b>	<b>\$23,226,887</b>	<b>\$24,174,516</b>	<b>\$25,250,511</b>	<b>\$26,566,814</b>	<b>4.9%</b>
Accum. Depreciation and Amortization	\$9,345,634	\$10,082,202	\$10,987,906	\$11,592,304	\$12,515,778	7.6%
<b>NET UTILITY PLANT</b>	<b>\$12,611,234</b>	<b>\$13,144,685</b>	<b>\$13,186,610</b>	<b>\$13,658,207</b>	<b>\$14,051,036</b>	<b>2.7%</b>
<b>OTHER PROPERTY AND INVESTMENTS</b>						
Nonutility Property	\$402,896	\$402,896	\$450,156	\$482,523	\$482,523	4.6%
Accum. Depreciation and Amortization	(\$124,638)	(\$133,008)	(\$142,030)	(\$151,451)	(\$161,344)	6.7%
Investments in Associated Companies	\$22,651	\$27,803	\$35,443	\$40,967	\$46,166	0.0%
Investment in Subsidiary Companies	-	-	-	-	-	NM
Noncurrent Portion of Allowances	-	-	-	-	-	0.0%
Other Investments	-	-	-	-	-	NM
Special Funds	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$300,909</b>	<b>\$297,691</b>	<b>\$343,569</b>	<b>\$372,039</b>	<b>\$367,345</b>	<b>5.1%</b>
<b>CURRENT AND ACCRUED ASSETS</b>						
Cash	\$742,986	\$635,447	\$70,069	\$51,304	\$179,321	-29.9%
Special Deposits	\$49,000	\$49,000	\$49,000	\$49,000	\$49,000	0.0%
Working Fund	-	-	-	-	-	NM
Temporary Cash Investments	-	-	-	-	-	NM
Notes Receivable	-	-	-	-	-	NM
Customer Accounts Receivable	\$1,219,437	\$1,069,325	\$1,033,642	\$1,233,222	\$1,111,789	-2.3%
Other Accounts Receivable	\$103,034	\$93,670	\$105,184	\$85,694	\$79,519	-6.3%
Accum. for Uncollectible Accounts	(\$27,393)	(\$35,805)	(\$44,329)	(\$34,851)	\$809	NM
Notes Receivable from Assoc. Companies	-	-	-	-	-	NM
Accts Receivable from Assoc. Companies	-	-	-	-	-	NM
Fuel Stock	-	-	-	-	-	NM
Fuel Stock Expenses Undistributed	-	-	-	-	-	NM
Residuals and Extracted Products	-	-	-	-	-	NM
Plant Materials and Operating Supplies	\$227,217	\$245,607	\$264,583	\$230,003	\$218,305	-1.0%
Merchandise	-	-	-	-	-	NM
Other Materials and Supplies	-	-	-	-	-	NM
Nuclear Materials Held for Sales	-	-	-	-	-	NM
Allowances	-	-	-	-	-	NM
Noncurrent Portion of Allowances	-	-	-	-	-	NM
Stores Expense Undistributed	691	50	-	-	-	NM
Gas Stored Underground-Current	-	-	-	-	-	NM
Liquefied Gas Stored and Held for Proc.	-	-	-	\$143	\$2	NM
Prepayments	\$22,065	\$44,243	\$11,584	\$10,861	\$12,504	-13.2%
Advances for Gas	-	-	-	-	-	NM
Interest and Dividends Receivable	-	-	-	-	-	NM
Rents Receivable	-	-	-	-	-	NM
Accrued Utility Revenues	\$483,808	\$389,914	\$412,482	\$453,398	\$412,118	-3.9%
Miscellaneous Current and Accrued Assets	\$95,133	\$104,977	\$114,671	\$124,962	\$135,764	9.3%
<b>TOTALS</b>	<b>\$2,915,978</b>	<b>\$2,596,428</b>	<b>\$2,016,886</b>	<b>\$2,203,736</b>	<b>\$2,199,131</b>	<b>-6.8%</b>
<b>DEFERRED DEBITS</b>						
Unamortized Debt Expenses	\$2,691	\$2,533	\$2,375	\$2,217	\$2,060	-6.5%
Extraordinary Property Losses	-	-	-	-	-	NM
Unrecovered Plant and Regulatory Study	-	-	-	-	-	NM
Other Regulatory Assets	\$740,195	\$331,655	\$511,124	\$414,809	\$262,607	-22.8%
Prelim. Survey and Investigation Charges	-	-	-	-	-	NM
Clearing Accounts	\$995	\$347	\$692	\$1,310	\$1,191	4.6%
Temporary Facilities	-	-	-	-	-	NM
Misc. Deferred Debits	-	-	-	-	-	NM
Def. Losses from Disposition of Plant	-	-	-	-	-	NM
Research, Devel. and Demonstration	-	-	-	-	-	NM
Unamortized Loss on Reacquired Debt	-	-	-	-	-	NM
Generation Supply Service Rate Recovery (GSSR)	(\$79,625)	(\$313,623)	\$74,753	\$339,324	\$324,201	NM
<b>TOTALS</b>	<b>\$664,256</b>	<b>\$20,912</b>	<b>\$588,944</b>	<b>\$757,660</b>	<b>\$590,059</b>	<b>-2.9%</b>
<b>TOTAL ASSETS AND OTHER DEBITS</b>	<b>\$16,492,377</b>	<b>\$16,059,716</b>	<b>\$16,136,009</b>	<b>\$16,991,642</b>	<b>\$17,207,571</b>	<b>1.1%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports



**Wellsboro Electric Company  
Balance Sheet**

BALANCE SHEET	2014	2015	2016	2017	2018	Compound Growth
<b>PROPRIETARY CAPITAL</b>						
Common Stock Issued	\$112,300	\$112,300	\$112,300	\$112,300	\$112,300	0.0%
Preferred Stock Issued	137,100	136,900	131,200	130,200	\$130,200	-1.3%
Capital Stock Subscribed	-	-	-	-	-	NM
Stock Liability for Conversion	-	-	-	-	-	NM
Premium on Capital Stock	\$77,257	\$77,257	\$77,257	\$77,257	\$77,257	0.0%
Donations from Stockholders	-	-	-	-	-	NM
Gain on Required Capital Stock	-	-	-	-	-	NM
Other Paid-in Capital Stock	\$50,589	\$50,589	\$50,589	\$50,589	\$50,589	0.0%
Installments Received on Capital Stock	-	-	-	-	-	NM
Discount on Capital Stock	-	-	-	-	-	NM
Capital Stock Expense	-	-	-	-	-	NM
Retained Earnings	-	-	-	-	-	NM
Unappropriated Retained Earnings	2,279,875	2,509,792	2,492,430	2,829,543	\$3,038,878	7.4%
Reacquired Capital Stock	(159,250)	(159,250)	(159,250)	(159,250)	(\$159,250)	0.0%
Other	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$2,497,871</b>	<b>\$2,727,588</b>	<b>\$2,704,526</b>	<b>\$3,040,639</b>	<b>\$3,249,974</b>	<b>6.8%</b>
<b>LONG-TERM DEBT</b>						
Bonds	-	-	-	-	-	NM
Reacquired Bonds	-	-	-	-	-	NM
Advances from Associated Companies	-	-	-	-	-	NM
Other Long-Term Debt	10,119,222	9,818,088	9,499,264	10,149,996	\$9,769,720	-0.9%
Unamortized Premium on Long-Term Debt	-	-	-	-	-	NM
Unamortized Discount on Long-Term Debt	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$10,119,222</b>	<b>\$9,818,088</b>	<b>\$9,499,264</b>	<b>\$10,149,996</b>	<b>\$9,769,720</b>	<b>-0.9%</b>
<b>OTHER NONCURRENT LIABILITIES</b>						
Obligations Under Capital Leases-Noncurrent	-	-	-	-	-	NM
Accum. Provision for Property Insurance	-	-	-	-	-	NM
Accum. Provision for Injuries and Damages	-	-	-	-	-	NM
Accum. Provision for Pensions and Benefits	\$505,500	\$529,528	\$556,309	\$490,970	\$468,809	-1.9%
Accum. Financial Transmission Rights	\$83,595	(\$75,922)	-	-	-	NM
Accum. Provision for Rate Refunds	-	-	-	-	-	NM
Long-Term Portion - Instrument Liabilities	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$589,095</b>	<b>\$453,606</b>	<b>\$556,309</b>	<b>\$490,970</b>	<b>\$468,809</b>	<b>-5.5%</b>
<b>CURRENT AND ACCRUED LIABILITIES</b>						
Notes Payable	-	-	\$600,000	\$625,000	\$1,000,000	NM
Accounts Payable	\$921,748	\$854,454	\$815,181	\$738,234	\$917,460	-0.1%
Notes Payable to Associated Companies	-	-	-	-	-	NM
Account Payable to Associated Companies	-	-	116,836	147,973	\$153,794	NM
Customer Deposits	\$73,325	\$82,025	\$84,007	\$75,270	\$78,795	1.8%
Taxes Accrued	\$153,367	45,921	(137,729)	(58,726)	(\$40,243)	NM
Interest Accrued	-	-	2,116	4,023	\$6,583	NM
Dividends Declared	-	-	-	-	-	NM
Matured Long-Term Debt	-	-	-	-	-	NM
Matured Interests	-	-	-	-	-	NM
Tax Collections Payable	-	-	-	-	-	NM
Misc. Current and Accrued Liabilities	\$32,365	\$19,979	\$6,117	\$83,274	\$10,556	-24.4%
Obligations Under Capital Leases-Current	\$776,784	\$636,755	\$504,383	\$482,189	\$371,722	-16.8%
<b>TOTALS</b>	<b>\$1,957,589</b>	<b>\$1,639,134</b>	<b>\$1,990,911</b>	<b>\$2,097,237</b>	<b>\$2,498,667</b>	<b>6.3%</b>
<b>DEFERRED CREDITS</b>						
Customer Advances for Construction	-	-	-	-	-	NM
Accum. Deferred Investments Tax Credits	-	-	-	-	-	NM
Def. Gains from Disposition of Utility Plant	-	-	-	-	-	NM
Other Deferred Credits	1,328,600	1,421,300	1,384,999	1,212,800	\$1,220,400	-2.1%
Other Regulatory Liabilities	-	-	-	-	-	NM
Unamortized Gain on Reacquired Debt	-	-	-	-	-	NM
Accum. Deferred Income Taxes	-	-	-	-	-	NM
<b>TOTALS</b>	<b>\$1,328,600</b>	<b>\$1,421,300</b>	<b>\$1,384,999</b>	<b>\$1,212,800</b>	<b>\$1,220,400</b>	<b>-2.1%</b>
<b>TOTAL LIABILITIES AND OTHER CREDITS</b>	<b>\$16,492,377</b>	<b>\$16,059,716</b>	<b>\$16,136,009</b>	<b>\$16,991,642</b>	<b>\$17,207,570</b>	<b>1.1%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Valley Energy, Inc.**  
**Financial and Operating Data and Statistics**

**Appendix E**  
**Page 1 of 2**

Operating Statistics	2014	2015	2016	2017	2018	Compound Growth
Gross Utility Plant	\$26,996,966	\$28,915,189	\$30,477,252	\$32,002,010	\$33,471,904	5.5%
Depreciation & Amortization	(11,435,820)	(12,240,355)	(12,934,250)	(10,437,328)	(11,452,746)	0.0%
Net Utility Plant	\$15,561,146	\$16,674,834	\$17,543,002	\$21,564,682	\$22,019,158	9.1%
<b>Operating Revenue:</b>						
Residential	\$5,555,559	\$5,209,469	\$4,072,571	\$3,973,503	\$4,634,029	-4.4%
Commercial	\$2,620,104	\$2,337,721	\$1,697,190	\$1,650,567	\$1,956,416	-7.0%
Industrial	\$2,198,925	\$2,811,322	\$2,806,259	\$2,814,402	\$3,017,715	8.2%
Other	-\$960,222	-\$1,510,565	-\$508,159	\$19,450	-\$534,175	-13.6%
Totals	\$9,414,366	\$8,847,947	\$8,067,861	\$8,457,922	\$9,073,985	-0.9%
<b>Deliveries by Volume (Mcf)</b>						
Residential	574,107	565,959	494,426	519,159	604,641	1.3%
Commercial	364,846	355,124	298,572	307,919	363,174	-0.1%
Industrial	2,501,343	2,348,049	22,633,207	40,044,435	35,813,990	94.5%
Other	10,187	11,868	9,277	9,751	10,280	0.2%
Total Mcf Sales	3,450,483	3,281,000	23,435,482	40,881,264	36,792,085	80.7%
Injected into Storage	0	442,261	409,924	434,031	447,147	NM
Interdepart. Sales	378,873	340,652	322,563	323,075	377,508	-0.1%
Exchange Gas, Off System Sales, etc.	0	0	0	0	0	NM
Total Deliveries (Mcf)	3,829,356	4,063,913	24,167,969	41,638,370	37,616,740	77.0%
Total Receipts (Mcf)	3,810,254	4,062,514	24,227,156	41,683,773	37,573,905	77.2%
Unaccounted for Gas (Mcf)	19,102	1,399	-59,187	-45,403	-42,835	NM
UfG as a % of Total Receipts	0.5%	0.0%	-0.2%	-0.1%	-0.1%	NM
<b>Customers (Average):</b>						
Residential	5,651	5,790	5,894	5,997	6,058	1.8%
Commercial	815	824	844	853	856	1.2%
Industrial	29	29	29	30	29	0.0%
Other	9	9	9	9	9	0.0%
Transportation						
Totals	6,504	6,652	6,776	6,889	6,952	1.7%
Employees (Average)	25	25	26	26	27	2.0%
Distribution Mains (M. Ft.)	771	780	781	782	782	0.4%
Transmission Mains (M. Ft.)	76	76	76	76	76	0.0%
Total Main Pipeline (M. Ft.)	847	856	857	858	858	0.3%
Total Main Pipeline (Miles)	160	162	162	163	163	0.3%
Services	6,642	6,578	6,693	6,789	7,047	1.5%

NM - Not Meaningful

Source: Pa PUC Annual Reports

**Valley Energy, Inc.**  
**Financial and Operating Data and Statistics**

**Appendix E**  
**Page 2 of 2**

Gas Operation & Maintenance Expenses	2014	2015	2016	2017	2018	Compound Growth
Natural Gas Production Expenses	0	0	0	0	0	NM
Other Gas Supply Expenses	4,734,020	3,680,450	2,868,626	3,137,231	3,349,457	-8.3%
Natural Gas Storage, Terminating, & Processing Expenses:	0	0	0	0	0	NM
Other Storage Expenses	37,616	39,713	20,229	22,625	32,754	-3.4%
<b>Transmission Expenses:</b>						
Operation	0	0	0	0	0	NM
Maintenance	0	0	0	0	0	NM
Totals	0	0	0	0	0	NM
<b>Distribution Expenses:</b>						
Operation	769,590	885,045	900,462	912,718	1,032,040	7.6%
Maintenance	240,866	263,976	344,893	346,580	285,030	4.3%
Totals	1,010,456	1,149,021	1,245,355	1,259,298	1,317,070	6.8%
Customer Accounts Expenses	489,017	559,025	542,378	609,142	635,188	6.8%
Customer Service & Inform. Expenses	1,303	1,524	2,527	1,240	1,276	-0.5%
Sales Expenses	2,515	3,232	6,986	4,143	3,828	11.1%
<b>Administrative &amp; General Expenses:</b>						
Operation	609,030	616,028	703,164	798,402	788,904	6.7%
Maintenance	19,786	12,343	10,639	19,478	22,214	2.9%
Totals	628,816	628,371	713,803	817,880	811,118	6.6%
<b>Total Gas Operation &amp; Maintenance Exp.</b>	<b>6,903,743</b>	<b>6,061,336</b>	<b>5,399,904</b>	<b>5,851,559</b>	<b>6,150,691</b>	<b>-2.8%</b>

NM - Not Meaningful

Source: Pa PUC Annual Reports

