

MANAGEMENT AND OPERATIONS AUDIT

DUQUESNE LIGHT COMPANY



PENNSYLVANIA PUBLIC UTILITY COMMISSION
BUREAU OF AUDITS
ISSUED JULY 2019

Docket No. D-2018-3000838

DUQUESNE LIGHT COMPANY MANAGEMENT AND OPERATIONS AUDIT

TABLE OF CONTENTS

<u>Chapter</u>		<u>Page</u>
I.	INTRODUCTION	1
	A. Objectives and ScopeB. Audit ApproachC. Functional Area RatingsD. BenefitsE. Recommendation Summary	1 2 3 4 5
II.	BACKGROUND	10
III.	EXECUTIVE MANAGEMENT AND ORGANIZATIONAL STRUCTURE	13
IV.	CORPORATE GOVERNANCE	24
V.	AFFILIATED INTERESTS AND COST ALLOCATIONS	29
VI.	FINANCIAL MANAGEMENT	36
VII.	ELECTRIC OPERATIONS	48
VIII.	CUSTOMER SERVICE	59
IX.	PURCHASING AND MATERIALS MANAGEMENT	66
X.	EMERGENCY PREPAREDNESS	69
XI.	HUMAN RESOURCES	71
XII.	FLEET MANAGEMENT	78
XIII.	INFORMATION TECHNOLOGY	82
XIV.	ACKNOWLEDGEMENTS	85
XV.	APPENDICES A. Financial and Operating Data and Statistics B. Balance Sheet	86

DUQUESNE LIGHT COMPANY MANAGEMENT AND OPERATIONS AUDIT

LIST OF EXHIBITS

<u>Exhibit</u>		<u>Page</u>
I-1	Functional Rating Summary	4
I-2	Quantifiable Savings Summary	5
I-3	Summary of Recommendations	7
II-1	DQE Holdings LLC Corporate Entity Chart as of January 1, 2018	11
II-2	Duquesne Light Company Operating Area – Allegheny and Beaver Counties	12
II-3	Duquesne Light Company Customer Base Statistics as of December 31, 2017	12
III-1	Duquesne Light Company Organizational Structure as of June 2018	14
III-2	Duquesne Light Company Span of Control as of June 13, 2018	20
IV-1	Duquesne Light Company Regulatory Compliance Organizational Structure as of December 2018	25
IV-2	Duquesne Light Company Internal Audit Department Organizational Structure as of December 2018	25
IV-3	Duquesne Light Company Internal Audit Workload Distribution as of December 2018	26
V-1	Duquesne Light Company Services Provided per Administrative Services Agreement	29
V-2	Duquesne Light Company Charges to Affiliated Companies for Goods and Services Provided by DLC for the Years 2015, 2016, and 2017	30
V-3	Duquesne Light Company Charges to DLC for Goods and Services Provided by Affiliated Companies for the Years 2015, 2016, and 2017	30
VI-1	Duquesne Light Company Finance Organization as of December 5, 2018	37

DUQUESNE LIGHT COMPANY MANAGEMENT AND OPERATIONS AUDIT

LIST OF EXHIBITS

<u>Exhibit</u>		<u>Page</u>
VI-2	Duquesne Light Company First Mortgage Bonds Payable as of May 1, 2018	40
VI-3	Duquesne Light Company Dividend Payout Ratio for the Years 2015 through 2017	40
VI-4	Duquesne Light Company Interest Coverage Ratio for the Years Ended 2015 through 2017	40
VI-5	Duquesne Light Company Retirement Plan Funding Status as of January 1, 2016 and 2017	41
VII-1	Duquesne Light Company Electric Operations Functional Organization as of August 2018	49
VII-2	Duquesne Light Company Electric Reliability Performance for the Years 2014 – 2017 and 3 rd Quarter 2018	51
VII-3	Duquesne Light Company Capital and Operation & Maintenance Expenditures for the Years 2014 through 2017 and January through November 2018	52
VII-4	Duquesne Light Company Craft Worker Staffing and Overtime Levels for the Years 2013, 2014, 2015, 2016, 2017 and as of November 2018	53
VII-5	Duquesne Light Company Historical and Projected Spend for LTIIP Projects For the Years 2011 through 2022	54
VII-6	Duquesne Light Company 10 Field Operations Employees with Highest Overtime Levels 2013 – November 2018	55
VII-7	Duquesne Light Company Overtime Data by Category for the Years 2013 through 2017	56
VII-8	Duquesne Light Company Third Quarter 2018 Reliability Report – Outage Causes	57

DUQUESNE LIGHT COMPANY MANAGEMENT AND OPERATIONS AUDIT

LIST OF EXHIBITS

<u>Exhibit</u>		<u>Page</u>
VIII-1	Duquesne Light Company Customer Service Organizational Structure as of December 2018	59
VIII-2	Duquesne Light Company Billing/Revenue Management Organizational Structure as of December 2018	60
VIII-3	Duquesne Light Company Contact Center Organizational Structure as of December 2018	61
VIII-4	Duquesne Light Company Meter Operations Organizational Structure as of December 2018	63
IX-1	Duquesne Light Company Procurement Organization as of December 2018	66
X-1	Pennsylvania Public Utility Commission Public Utility Security Planning and Readiness Self Certification Form	69
XI-1	Duquesne Light Company Human Resources Organizational Structure as of December 2018	71
XI-2	Duquesne Light Company Safety, Health, and Environmental Organizational Structure as of December 2018	74
XI-3	Duquesne Light Company Safety Performance Metrics for the Years 2013 through 2017	75
XI-4	Duquesne Light Company Bersin & Associates' HR Maturity Model	76
XII-1	Duquesne Light Company Transportation Department as of June 13, 2018	78
XII-2	Duquesne Light Company Transportation Department Vehicles and Equipment at Year End 2016, 2017 and as of May 2018	80
XIII-1	Duquesne Light Company Information Technology Organization as of December 2018	82
XIII-2	Duquesne Light Company Information Technology Areas of Responsibility as of December 2018	83

I. INTRODUCTION

In accordance with the Pennsylvania Public Utility Commission's (PUC or Commission) program to identify improvements in the management and operations of fixed utilities under its jurisdiction, it was determined that a management and operations audit should be conducted of Duquesne Light Company (DLC or company). DLC is an electric distribution utility headquartered in Pittsburgh, Pennsylvania that is a wholly owned subsidiary of Duquesne Light Holdings Inc. (DLH), an energy services holding company, which in turn is a wholly owned subsidiary of DQE Holdings LLC (DQE). Management and operational audits, which are required of certain utility companies pursuant to 66 Pa. C.S. § 516(a), 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).

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, DLC, and the public with an assessment of the efficiency and effectiveness of DLC's 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 DLC.

The scope of this audit was limited to certain areas of DLC, as explained in Section B, Audit Approach.

B. Audit Approach

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

- A five-year internal trend (2013 2017) and ratio analysis was completed using financial and operational data obtained from DLC, Commission, and other available sources.
- Input was solicited from Commission Bureaus and Offices, certain external parties, and DLC, regarding any concerns or issues they would like addressed during our review.
- 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.

This information was used to focus the auditors' work efforts in the field. 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
- Customer Service
- Purchasing and Materials Management
- Emergency Preparedness
- Human Resources
- Fleet Management
- Information Technology

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. Had 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.

The fieldwork began on June 19, 2018 and continued intermittently through December 18, 2018. The principal components of the fact gathering process included:

- Interviews with DLC and DQE 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 2013-2017, and year-to-date 2018, as available.
- Visits to the corporate offices of DLC, service centers which included warehouse and stockrooms, customer assistance and customer response centers; and direct observation of several other selected work practices.

C. <u>Functional Area Ratings</u>

For the functions or areas of DLC that were selected for in-depth examination, the auditors rated the operating or performance level 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 DLC's 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 reviewed can be found in Exhibit I-1 on the next page.

Exhibit I – 1 Duquesne Light Company 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
Executive Management and Organizational Structure			х		
Corporate Governance		X			
Affiliated Interests and Cost Allocations	х				
Financial Management		X			
Electric Operations				x	
Customer Service			Х		
Purchasing and Materials Management			х		
Emergency Preparedness	x				
Human Resources		x			
Fleet Management		Х			
Information Technology		Х			

D. Benefits

Where possible, the auditors tried to quantify potential savings expected from implementing the recommendations made in this report. The audit report contains potential annual cost savings of approximately \$286,000, and a potential one-time cost savings of about \$1,500,000. We tried to identify, whenever practical, the potential savings net of the projected costs for implementation. Some of these savings could be an actual reduction in costs, avoided costs or increased revenues; whereas others would result in better deployment and/or use of existing resources. These quantifications require some judgment and may require efforts beyond the scope of the audit for further refinement. Therefore, actual benefits from effective implementation of the recommendations are subject to uncertainty and could be higher or lower than the estimate. An overall summary of the annual and one-time costs savings quantified in the audit report are shown in Exhibit I-2.

Exhibit I – 2 Duquesne Light Company Management and Operations Audit Quantifiable Savings Summary

Recommendation	Annual Savings	One-Time Savings
Establish overtime level goals for each of the functional groups with an overall goal not to exceed 20% and develop craftworker staffing levels and contractor resources accordingly to address the future workload, including work related to the Long-Term Infrastructure Improvement Plan. (VII-1)	\$181,000	
Implement Maximo for enhanced inventory tracking and reporting, and establish inventory turnover goals based on optimal usage patterns. (IX-1)	\$105,000	\$1,500,000
Totals	\$286,000	\$1,500,000

For most of the recommendations, it is impractical to estimate quantitative benefits as their benefits are of a qualitative nature or insufficient data was available to quantify the impact. For example, it is difficult to estimate the actual benefit where new management practices or procedures are recommended where such did not previously exist or was 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.

The company 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 by the reader that the cost of implementing certain recommendations could be significant.

E. Recommendation Summary

Chapters III through XIII 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:

➤ <u>INITIATION TIME FRAME</u> – Estimated time frame for how quickly DLC should be able to initiate its implementation efforts, given DLC's 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.

- ▶ <u>BENEFITS</u> 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.
 - <u>LOW BENEFITS</u> Implementation of the recommendation is likely to result in service improvements, improvements in management practices and performance, and/or enhance cost control.

Duquesne Light Company Summary of Recommendations

Baa		Dogo	Initiation	Benefits				
Rec. No.	Recommendation	Page No.	Time Frame	(including \$ estimates)				
Chapt	ter III – Executive Management	1						
111.4	Establish an annual management committee self-	00	6 – 12	1				
III-1	evaluation and/or survey to assess the efficiency	23	Months	Low				
	and effectiveness of each management committee. Perform a follow-up to the Span of Control							
III-2	Assessment after completing the current	23	12 – 18	Medium				
111-2	reorganization.	20	Months	Mcdidili				
	Establish individual goals for the CEO that are							
0	specific, measurable, attainable, relevant and time-	00	6 -12	1				
III-3	based, and linked specifically to corporate goals	23	Months	Low				
	and objectives similar to what existed in 2014.							
Chapt	ter IV – Corporate Governance	T	1					
	Include within the profile currently being developed							
IV-1	to hire an independent director the consideration	28	3 – 6	Medium				
	criterion that a candidate may qualify as an		Months					
	SEC-defined AC financial expert. Implement a quality assurance and improvement							
	program that meets IIA Standard 1300 and its							
	subcategories as well as prepare written policies		6 – 12 Months					
IV-2	and procedures for the IAD that provide guidance	28		Low				
	on internal audit activity that meets IIA Standard		Wieritine					
	2040.							
Chapt	ter V – Affiliated Relationships and Cost Alloca	tions	1					
	None							
Chapt	ter VI – Financial Management							
	Conduct a review of all finance and accounting							
VI-1	policies and procedures to ensure administrative	47	6 -12	Low				
	controls are standardized and applied uniformly.	1	Months	20				
	Create a formal variance policy that includes a							
VI-2	threshold (percentage and/or amount) for variances	47	6 – 12	Medium				
V1 Z	to be tracked and explained through documentation.	-,	Months	Wicdiam				
	, , , , , , , , , , , , , , , , , , , ,	1						
Chapt	ter VII – Electric Operations							
	Establish overtime level goals for each functional							
	group with a goal not to exceed 20% and develop			High				
VII-1	craftworker staffing levels and contractor resources	58	6 – 12	\$181,000				
	to address the future workload, including work		Months	Annual Savings				
	related to the Long-Term Infrastructure							
	Improvement Plan.							
	Monitor and control individual employee overtime		6 40	LJ;				
VII-2	levels by using overtime exception reports to actively review employees incurring excessive	58	6 – 12 Months	High				
	amounts of overtime.		IVIOLITIS					
	amounts of overtime.							

Duquesne Light Company Summary of Recommendations

			Initiation	Benefits				
Rec.		Page	Time	(including				
No.	Recommendation	No.	Frame	\$ estimates)				
Chant	Chapter VIII Floatric Operations (continued)							
Спарі	ter VII – Electric Operations (continued) Include additional descriptors to outage causes and							
	report tree-related causes as being either							
	Vegetation Inside ROW or Vegetation Outside ROW		6 – 12	_				
VII-3	for a more effective analysis of possible remedial	58	Months	Low				
	actions to outage causes in future Annual and							
	Quarterly Electric Reliability Reports to the PUC.							
	Create a summary report of annual transmission		6 – 12					
VII-4	and distribution line repairs to trend inspection and	58	Months	Low				
	maintenance activities.		IVIOTILIS					
Chant	ter VIII – Customer Service							
Shapi	Implement the extensive testing phase and training		4 2					
VIII-1	phase currently planned to prepare for the	65	1 – 3	High				
	December 2019 customer care system update.		Months	3				
	Establish, implement, and monitor key performance		0 0					
VIII-2	indicators of third-party collection agency net	65	3 – 6	Medium				
	recovery performance goals.		Months					
	L	I						
Chapt	er IX – Purchasing and Materials Management	1	T					
	lumplement Marine of an amban and inventory tracking			Medium				
IX-1	Implement Maximo for enhanced inventory tracking and reporting, and establish inventory turnover	68	6 – 12	One-Time Savings - \$1.5 million				
177-1	goals based on optimal usage patterns.	00	Months	Annual Savings -				
	godio bacca on opilinal acage patterne.			\$105,000				
		•		,				
Chapt	er X – Emergency Preparedness	ı	T					
	None							
Chapt	er XI – Human Resources							
	Revise written documents used to engage							
	contractors to include consistent language requiring							
XI-1	contractors to comply with all OSHA standards and	77	6 – 12	Madium				
XI- I	to remove any language directing contractors to	//	Months	Medium				
	comply with undefined safety directives of							
	representatives of DLC.							
Chant	Chapter XII – Fleet Management							
Chapt	Create an action plan to identify and resolve root		0 0					
XII-1	causes of erroneous data to ensure fleet utilization	81	3 – 9	Low				
	reports are accurate.		Months					
	Establish a formal procedure for the disposal,		1 – 3					
XII-2	retirement and transfer of Duquesne Light Company	81	Months	Low				
	fleet vehicles.		WIGHTE					

Duquesne Light Company Summary of Recommendations

Rec. No.	Recommendation ter XIII – Information Technology	Page No.	Initiation Time Frame	Benefits (including \$ estimates)
XIII-1	Continue to improve the information technology score via enhanced information technology capabilities, internal controls and governance, and coordination with internal business partners; furthermore, periodically reevaluate the information technology maturity rating.	84	1 - 3 Months	Low

II. BACKGROUND

Duquesne Light Company (DLC or company) is an electric distribution utility headquartered in Pittsburgh, Pennsylvania. DLC is a wholly owned subsidiary of Duquesne Light Holdings Inc. (DLH), an energy services holding company, which in turn is a wholly owned subsidiary of DQE Holdings LLC (DQE). In May 2007, a consortium of private equity investors acquired all the common equity of DQE.

The members of the consortium have changed through the years. Currently, Epsom Investment Pte. Ltd. is an affiliate of GIC Pte. Ltd. (GIC). GIC is a global investment management company established in 1981 to manage Singapore's foreign reserves. GIC owns 44.4% of DQE and has been an owner since 2011. Three Rivers Utility Holdings, LLC (Three Rivers) is formed under the laws of the State of Delaware. Its members are John Hancock Entities (JHE) and PGGM Infrastructure Fund 2016 (PGGM). JHE and PGGM hold 33.33% and 66.67%, respectively, of the membership interests in Three Rivers. Three Rivers owns 30.4% of DQE and has been an owner since 2016. AIA Montana LLC (AIA) is managed by Argo Infrastructure Partners, based in New York City and is owned by APG Americas Infrastructure and the California State Teachers' Retirement System. AIA owns 25.2% of DQE and was been an owner since 2017. A corporate entity chart of DQE Holdings and its subsidiaries is shown in Exhibit II-1.

The principal business segments of DQE include utility and communications segments. The utility operations are conducted by DLC to provide electric power distribution to nearly 600,000 customers located in Allegheny and Beaver counties in southwestern Pennsylvania. This segment is regulated by the Pennsylvania Public Utility Commission (PUC or Commission). DLC divides its service territory into five operating areas within the two counties. A depiction of the service territory, broken down by county, is provided in Exhibit II-2. DLC staffs non-union and union employees throughout its territory; union employees are represented by the International Brotherhood of Electrical Workers (IBEW). The communication segment operations are conducted by DQE Communications, LLC (DQE Comm), which was established in 1997. DQE Comm presently operates throughout western Pennsylvania and northern West Virginia providing customized fiber optic service and support to organizations throughout their service territory.

Although the DQE affiliates shown in Exhibit II-1 are organized as separate legal companies, all entities of DQE are managed collectively as an integrated business model. DLC's organizational structure includes a key group of executives that may hold officer level positions across the various affiliates. However, these positions have specific responsibilities and the auditors found that this structure does not inhibit organizational effectiveness.

Exhibit II – 1
DQE Holdings LLC Corporate Entity Chart
As of January 1, 2018

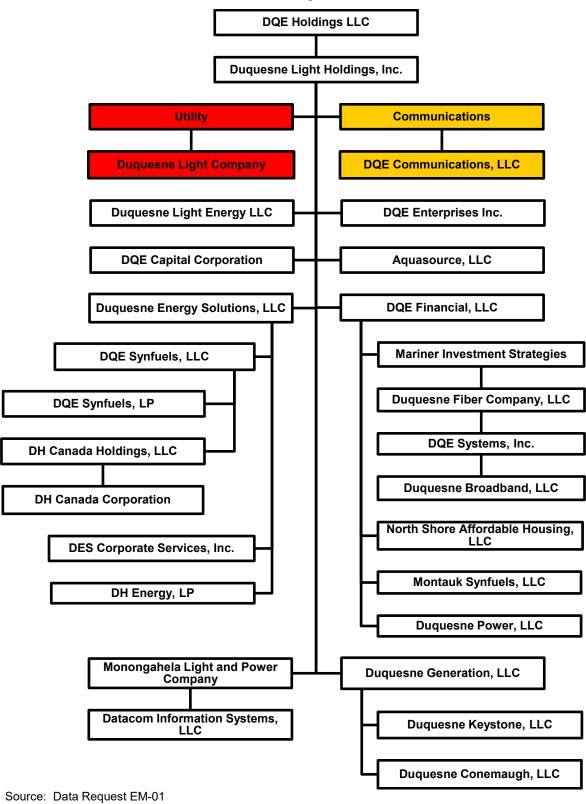
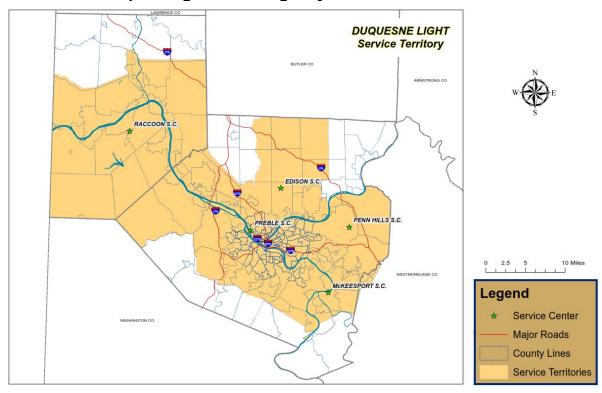


Exhibit II – 2
Duquesne Light Company
Operating Area – Allegheny and Beaver Counties



Source: Duquesne Light Company website, December 26, 2018

Exhibit II-3 provides customer base statistics for residential, commercial and industrial customers for calendar year 2017. Within the DLC service territory, there were about 593,000 customers as of December 31, 2017. DLC had sales revenue of \$807.3 million for calendar year 2017; revenue was based on the electric sales volume of 12.6 billion KWH. Residential customers accounted for 89.73% of the customer base, 30.71% of KWH sales, and 64.22% of operating revenue. Commercial customers accounted for 10.08% of the customer base, 48.43% of KWH sales, and 30.64% of operating revenue. Industrial customers accounted for 0.19% of the customer base, 20.86% of KWH sales, and 5.14% of operating revenue.

Exhibit II – 3
Duquesne Light Company
Customer Base Statistics
As of December 31, 2017

Customer	No. of	% of	KWH	% of KWH	Sales Revenue	% of
Class	Customers	Customers	Sold	Sold	(\$)	Revenue
Residential	532,204	89.73%	3,876,119,125	30.71%	518,446,827	64.22%
Commercial	59,801	10.08%	6,111,717,479	48.43%	247,363,994	30.64%
Industrial	1,098	0.19%	2,632,036,836	20.86%	41,524,040	5.14%
TOTALS	593,103	100.00%	12,619,873,440	100.00%	\$807,334,861	100.00%

Source: PUC Annual Report Schedule 600 and Auditor Analysis

III. EXECUTIVE MANAGEMENT AND ORGANIZATIONAL STRUCTURE

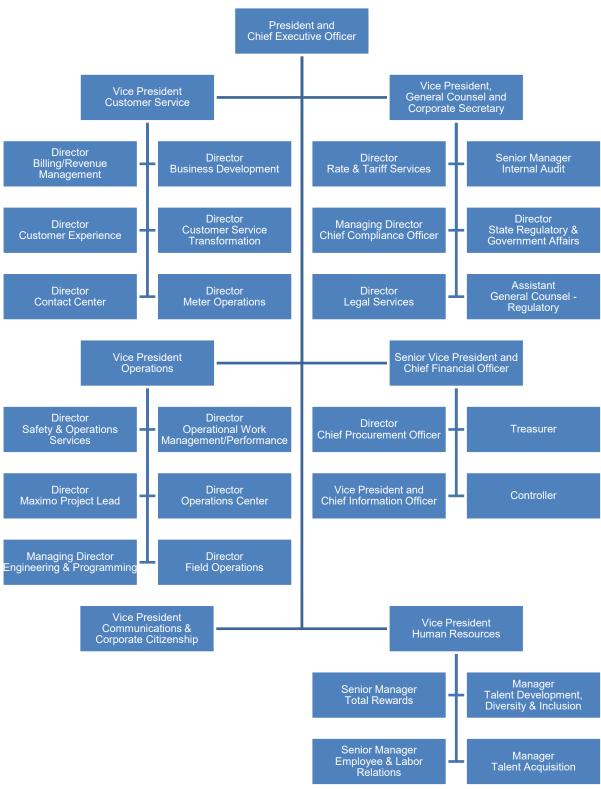
Background

As discussed in Chapter II – Background, Duquesne Light Company (DLC or company) is an electric distribution utility that is a wholly-owned subsidiary of Duquesne Light Holdings, Inc. (DLH), which in turn is a wholly-owned subsidiary of DQE Holdings LLC (DQE). Exhibit III-1 displays the organizational structure of the executive management team at DLC as of June 2018. In some cases, officers of DLC also serve as officers of other affiliates. As explained later, DLC has gone through a significant reorganization over the last five years that changed the executive reporting structure.

DLC's executive compensation is administered by the Human Resources business unit and DQE's Compensation Committee (see Chapter IV – Corporate Governance). DLC uses third-party market data sources to benchmark pay for executive positions by way of a custom peer group. Total compensation for executive officers is structured for a privately-owned company by way of the following components:

- Base Salary Paid in cash throughout the year with merit increases based on performance. Market Reference Points (MRP) are established by DLC for each job and represent competitive median base salary. Base salaries are aimed to be within a band of plus or minus 15% of the MRP.
- Short Term Incentive Compensation (STIP) Cash incentive that is paid after each annual performance year ends. STIP targets are established by career level and represent the target incentive level as a percentage of base salary.
- Long Term Incentive Compensation (LTIP) Deferred cash incentive that is granted annually and paid after the three-year performance period ends.
 LTIP targets are based on market data and are established for each eligible job (director and above).

Exhibit III – 1
Duquesne Light Company
Organizational Structure
As of June 2018



DLC implemented its most recent succession plan in 2014 after a complement review showed a critical need due to the large number of projected retirements (including leadership positions) and in consideration of DLC's planned strategic initiatives. In November 2013, the current Vice President, Human Resources was hired with a primary objective of re-building the workforce; both from a leadership and technical perspective. At the time, about 50% of DLC's workforce was eligible for retirement over the five-year period (2014 - 2018). Additionally, there had been a depletion of technical talent across multiple functional areas including IT, operations, engineering, customer service, regulatory compliance and analytics (within the Finance business unit).

In consultation with the Chief Executive Officer, Human Resources implemented a succession planning process. The focus was on gathering information on existing talent, identifying single points of failure, and identifying gaps where work was not being completed because there were not people in place. The succession plan is updated annually by Human Resources, working together with each business unit, and focuses on business resiliency, top talent identification, single point of failure mitigation, and talent demographics/planning.

As part of its re-organization efforts, customer service leadership was replaced in early to mid- 2018. There are some final revisions and re-alignments to be made that will likely conclude in 2019 or mid-2020 as DLC on-boards a new President and Chief Executive Officer (CEO) to ensure alignment with their vision. During the time of this re-organization, over 800 new employees were hired and DLC has since dropped its eligible employee retirement candidates (those retiring within five years) to under 21%. This has resulted in re-building technical acumen within the professional employee and skilled physical workforce. In addition, performance metrics related to reliability, project completion, capital expansion, and IT projects implemented successfully have improved.

The auditors reviewed DLC's strategic planning process. DLC's vision, mission, and values define its business strategy supported by a five-year business plan. The business plan identifies defined strategic priorities in support of achieving the plan objectives. DLC's most recent plan, as of June 2018, was based upon three overarching objectives listed below:

- Deliver sustained 4-5% compound annual growth of earnings before interest, tax, depreciation and amortization (EBITDA)
- Provided best-in-class safety, reliability, security and customer satisfaction
- Prepare for the future to capitalize on new opportunities

To achieve the objectives, the business plan identifies the following nine strategic priorities:

 Deliver customer engagement that serves customers evolving preferences and energy needs

- Operate with industry leading efficiency and reliabilities (benchmarked as a high-performance company)
- Protect and mitigate threats to critical assets
- Position the utility for the future by growing throughput, modernizing infrastructure, and ensuring adequacy of capital
- Shape the regulatory environment to ensure the utility is compensated appropriately for its services
- Capitalize on energy industry trends and emerging technologies by investing in opportunities outside the utility
- Achieve sustainable top quartile safety performance and prevent life changing events through company-wide commitment
- Attract, develop, and retain high performing talent to meet current and future needs
- Be viewed as a good corporate citizen by the community through environmental stewardship, diversity and inclusiveness, and as a partner within the community

Multi-year corporate initiatives are established to support the strategic priorities. DLC's overall performance expectations are set annually through Key Performance Indicators (KPIs) and corresponding targets are set during the annual business planning process. The most critical KPIs are reflected in short-term and long-term incentive compensation and impact employee payouts under both plans.

DLC contends their management structure continues to change and remains dynamic with the goal of creating organizational alignment to meet business requirements and provide the best service to customers in the most efficient manner. The following summarizes major corporate restructurings since November 2013:

- Prior to 2015, the Strategy and External Affairs division was led by the Vice President, Strategy and External Affairs. This division included Government Relations, Media and Community Relations, and Rates and Tariff Services groups. In January 2015, the division was dissolved, and these groups were reassigned to divisions led by other executives.
 - The Media and Community Relations group was re-organized under the CEO. A director-level position was created to lead the group's efforts. Soon after, the incumbent director was promoted to the vice president level, and additional staffing was approved as the group's responsibilities expanded to include all internal and external communications as well as corporate citizenship and community relations efforts. The group was renamed Communications and Corporate Citizenship.
 - The Government Relations group was reorganized within the Office of General Counsel (OGC). A director-level position was created, and additional staffing was approved to carry out the group's responsibilities, which include state regulatory strategy and government affairs. The group was renamed State Regulatory and Government Affairs.

- The Rates and Tariff Services group was reorganized under the Office of the Chief Financial Officer and subsequently transferred to report through the OCG in May of 2015. The Rates and Tariff Services group maintains and updates the rules, rates and riders in DLC's retail tariff and Electric Generation Supplier (EGS) coordination tariff.
- The Information Technology (IT) business unit underwent a significant reorganization in 2015 after the hiring of a new Chief Information Officer (CIO). IT is currently organized into the following divisions: Corporate Applications, Technology Services, Information Security, Customer Applications, Operations Applications, Project Management Office, the Office of the CIO and IT Shared Services (see Chapter XIII – Information Technology).
- In 2013, the Human Resources (HR) business unit was realigned to report directly to the CEO. Prior to that, the business unit was led by a director-level position. After upgrading this position to the vice president level, HR is now comprised of divisions requiring specific functional expertise: Employee and Labor Relations, Talent Acquisition, Total Rewards/Human Resource Information Systems (HRIS), and Talent Development/Diversity and Inclusion (see Chapter XI – Human Resources).
- The Meter Services group was moved from within the Operations business unit to the Customer Service business unit, given the customer-facing involvement with the advanced metering implementation (AMI).

Findings and Conclusions

Our examination of the Executive Management and Organizational Structure included a review of DLC'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, DLC 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. Duquesne Light Company (DLC) does not perform formal management committee evaluations and/or surveys.

DLC utilizes the following five management committees that meet periodically throughout the year:

 The Corporate Policy Committee meets quarterly to review and approve all new corporate policies of DLC and its affiliates, as well as any significant, substantive changes made to corporate policies due to changes in law, regulation or other circumstances, in accordance with the Policy on the

Development and Maintenance of Corporate Policies and as outlined in the Corporate Policy Committee Charter.

- The Conflict of Interest Committee (Committee) meets quarterly to evaluate conflicts of interest brought to the Committee's attention in accordance with the DLC Policies for Ethical Conduct and the Conflict of Interest Committee Charter. The Committee acts on an informed basis, in good faith, and in the honest belief that any act taken by the Committee is in the best interest of DLC.
- The Executive Reliability Steering Committee meets monthly to discuss current compliance matters, including pending self-reports and mitigation items pertaining to the North American Electric Reliability Corporation's reliability standards.
- The Threat Assessment Team (TAT) meets quarterly to develop, implement and administer a program to prevent workplace violence and respond to emergent situations. The TAT accomplishes this chiefly by assessing workplace violence risks at the DLC's work sites, developing a plan for eliminating or mitigating those risks and overseeing DLC's response in the unlikely event that a workplace violence situation occurs. The TAT reviews and updates procedures for managing workplace violence threats, including DLC's Workplace Violence Prevention and Response Program, in accordance with DLC's policies.
- The Charitable and Community Giving Committee meets quarterly to administer the giving programs of DLC, including the approval of charitable gifts and sponsorships of \$15,000 or more to 501(c)(3) organizations and equivalent state or municipal government counterparts.

DLC stated that each management committee reviews and updates its charter periodically. When considering changes to a committee charter, all committee members are expected to assess the committee's efficiency and effectiveness alone and through discussion with other members. The self-reflecting feedback is not formalized. The management committees do not routinely perform confidential surveys with members to evaluate the performance of each committee. DLC contends that the feedback process serves as an appropriate method of evaluation in lieu of written forms.

To ensure honest and objective feedback regarding the performance of each management committee, it is a best practice to complete confidential evaluations and/or surveys by committee members. Without an annual formal evaluation and/or survey, each of the committees may not receive any useful feedback from its members to offer meaningful information that could be used when annually updating the committee charters. This would also give the committee members an opportunity to assess the implementation and results of the prior year's plan.

2. The 2018 Span of Control Assessment is out-of-date due to a significant reorganization.

Span of control refers to the number of subordinates a manager or supervisor directly supervises in an organization. Factors affecting span of control in an organization include:

- Nature of work;
- Similarity of work functions;
- Control practices followed;
- Geographic proximity;
- Degree of supervisory coordination needed;
- Operational assistance available to the manager;
- Effectiveness of communication;
- · Capacity of subordinates;
- Ability of the executive; and
- Time available for supervision.

DLC completed a Span of Control Assessment on June 13, 2018. As shown in Exhibit III-2, the Span of Control Assessment determined that of the 265 reporting relationships identified, 40% have a span of control of 1:3 or less, while 20% have a span of control of 1:10 or higher. This is a relatively high number of positions with low and high spans; however, DLC has been in a reorganization before, during, and since the Span of Control Assessment was completed. New positions have been created; some of which have yet to be filled as of December 2018. Because of the reorganization, it is difficult to determine the status of DLC's span of control.

To maximize organizational efficiency and effectiveness, DLC should aim for spans of control in the range of 1:4 to 1:9 to control layers of management and maintain effective communications. Overly narrow spans are considered inefficient because they can result in inefficient communications, micro-management, a larger number of supervisors, and higher than necessary compensation costs. Spans that are too wide can result in poor performance due to a lack of effective oversight and control. There are situations where it may be appropriate for a supervisor to have a span of control outside of the stated ideal range. For example, certain functions may require a position of authority to manage the function as opposed to managing employees (i.e., low spans of control), whereas other positions may manage a pool of employees that routinely perform a repetitive task (i.e., high spans of control).

Exhibit III – 2 Duquesne Light Company Span of Control As of June 13, 2018

Reporting Ratio	Number of Relationships	Percent of Total Relationships
1 to 0	15	6%
1 to 1	25	9%
1 to 2	29	11%
1 to 3	38	14%
< 1 to 4 Subtotal	107	40%
1 to 4	29	11%
1 to 5	23	9%
1 to 6	18	7%
1 to 7	17	6%
1 to 8	8	3%
1 to 9	11	4%
1 to 4 to 1 to 9 Subtotal	106	40%
1 to 10	10	4%
1 to 11	2	1%
1 to 12	3	1%
1 to 13	5	2%
1 to 14	6	2%
1 to 15	5	2%
1 to 16	7	3%
1 to 17	4	2%
1 to 18	5	2%
1 to 19	2	1%
1 to 20	1	0%
1 to 22	1	0%
1 to 25	1	0%
>1 to 9 Subtotal	52	20%

Source: Data Request EM-34

A span of control analysis should be periodically reviewed as part of an organization study to ensure there are sufficient levels of management oversight in each department and whether the job titles identify and match the levels of responsibility for each position to achieve and maintain the most effective and efficient organizational structure. Due to the reorganization that is taking place at DLC, positions are being moved, re-named, filled, discontinued, etc. and the Span of Control Assessment will need to be revisited.

3. The President and Chief Executive Officer's individual goals and objectives for 2018 are more subjective and ambiguous in comparison to prior years.

A portion of the CEO's short-term incentive plan is based upon individual performance, which is assessed through goals and objectives measured using three or more performance measures. Each measure is weighted, and achievement is assessed based on a specified target level of performance. A review of the CEO's individual goals and objectives for the years 2014 through 2018 reflected measurable goals and objectives in 2014 with performance expectations linked to specific dates of completion, dollar amounts, or other defined performance measures. However, the 2018 individual goals and objectives are more subjective and ambiguous with none of the quantifiable elements previously used. The 2018 goals and objectives of the CEO were as follows:

Goal: Oversee and deliver the 2018 business plan

Objective: Appropriately prioritize key initiatives and resources

Goal: Deliver strategic plan

Objectives:

1. Execute regulatory strategy

- 2. Achieve transportation electrification strategy milestones
- **3.** Achieve technology platform implementation milestones
- **4.** Longer term: identify and apply technology that is transformational to the business
- **5.** Shorter term: identify innovation opportunities to drive down unit/transactional cost

Goal: Regulatory/legislative leadership

Objective: Position DLC as a trusted thought leader with external stakeholders at the federal, state, and local level

DLC stated that the short-term plans are set forth in the KPIs established for the annual business plan and reflected in the CEO's goals and objectives. Accomplishment of the short-term plans is measured against the corporate balanced scorecard. According to DLC, the long-term plans of DLC are set forth in the strategic plan which is also reflected in the CEO's goals and include objectives relating to regulatory strategy, transportation electrification and technology transformation.

DLC established SMART goals and objectives for all other DLC employees in 2018 and this approach existed previously in 2014 for the CEO. To be effective, goals and objectives should meet the following SMART criteria:

- Specific well-defined and focused
- Measurable metrics and milestones used to determine if a goal is being met
- Achievable attainable, yet challenging to motivate
- Relevant link the goal to business unit or corporate goals
- Time sensitive realistic target dates for deliverables

After setting the CEO's individual goals and objectives for 2013 and 2014, the Board determined that the CEO's individual goals and objectives were too detailed and prescriptive, making it difficult to maintain alignment between the CEO's goals and objectives and the corporate balanced scorecard. The corporate balanced scorecard reflects the status of completing DLC KPIs in support of the strategic priorities and objectives. Consequently, beginning in 2015 and 2016, the CEO's individual goals and objectives were configured to reflect the six key areas of DLC (Operations, Compliance, Customer Care, Technology, Regulatory/Legislative, Culture/Employee Engagement). For 2017 and 2018, the Board reportedly streamlined the CEO goals and objectives to simply reflect the achievement of the business and strategic plans as short and long-term goals (rather than list and hold the CEO accountable for the individual elements of each plan), and exercising regulatory and legislative leadership. However, as written in 2018, the goals and objectives don't explicitly state how to achieve the business and strategic plans, or exercise regulatory and legislative leadership, nor provide specific metrics of how to measure achievement.

Although DLC has referenced source documents regarding the details for the CEO's 2018 goals and objectives (e.g., 2018 business plan, strategic plan, and the corporate balanced scorecard), the CEO's stated goals and objectives provided to the auditors were ambiguous and did not provide sufficient detail to ascertain what was to be achieved and the associated timeframe. Ambiguous goals and objectives can result in:

- Inability to identify if the actions have achieved the desired outcomes by the target dates. Although DLC's Board believes the prior use of specific, measurable goals were too detailed and prescriptive to align the CEO's goals to the corporate balanced scorecard, applying the specific measures of KPIs found in the corporate balanced scorecard would in fact align the CEO's specific goals to the corporate balanced scorecard. In addition, including dates for completing various milestones facilitates the proper planning and execution of resources and establishes accountability.
- Lack of focus and the performance of tasks that do not effectively accomplish what was expected or desired, which results in failure to meet individual and corporate objectives. The key initiatives of the 2018 business plan are Safety, Customer Focus, Operational Excellence, Financial Performance, Employee Engagement and Corporate Social Responsibility. DLC's purpose of those key initiatives is to guide the development of annual KPIs in support of the initiatives. Annual KPIs are to be completed by the end of the year to which they relate and are measured at year-end against the corporate balanced scorecard. Identifying specific tasks to achieve the desired levels of performance of each KPI is imperative. As of November 2018, it appears that DLC may not achieve its target in 7 of 18 KPIs established for 2018, therefore, it is unclear if the company will interpret the

CEO's goal to oversee and deliver the 2018 business plan as being achieved since it lacks sufficient detail to define and measure any accomplishment.¹

Recommendations

- 1. Establish an annual management committee self-evaluation and/or survey to assess the efficiency and effectiveness of each management committee.
- 2. Perform a follow-up to the Span of Control Assessment after completing the current reorganization.
- 3. Establish individual goals for the CEO that are specific, measurable, attainable, relevant and time-based, and linked specifically to corporate goals and objectives similar to the prior approach used in 2014.

¹ DLC's OSHA Recordable Rate, DART Rate, Lost Time Accident Rate, SAIDI, Capital Spend, Retention Rate of Employees, and their Community Reputation grade as of November 2018 were at levels that indicated the company would not achieve the end of year target performance.

IV. CORPORATE GOVERNANCE

Background

Duquesne Light Company's (DLC) Board of Directors (Board) has identical membership as its parent company, DQE Holdings LLC (DQE). Per DQE's LLC Agreement, each ownership member of the privately held corporation who holds at least 10% of the DQE interests issued and outstanding is entitled to appoint a member director for each 10% of interests held provided that no one ownership member is entitled to appoint more than two-member directors. There are currently three ownership members each owning more than 20% of the DQE interests issued and outstanding; accordingly, there are six-member directors. In addition, the LLC Agreement provides that DLC is entitled to appoint its Chief Executive Officer (CEO) to be a director and that the Board may appoint one individual who is not an affiliate of any ownership member as an independent director. In total, there were eight active directors on the Board as of December 31, 2018.

The Board provides oversight of DLC through the following five chartered Board Committees:

- Asset Management Committee reviews the operational and financial performance as well as monitors the operations of the company monthly;
- Audit Committee (AC) oversees the integrity of the financial statements of the DQE companies, the work and independence of both the Internal Audit Department (IAD) and the contracted external auditor, the company's Enterprise Risk Management framework, compliance, and cybersecurity programs;
- Business Plan and Budget Review Committee reviews and recommends for approval the annual budget and the three to five-year business plan of the DQE companies;
- Compensation Committee assists the Board with its responsibilities relating to compensation and benefits of the officers, executives, and employees as well as oversees long-range planning for executive development and succession; and
- Governance and Regulatory/Public Affairs Committee assists the Board in setting governance policies as well as provides oversight regarding community involvement and regulatory activities.

The auditors reviewed the Board's and Board Committees' meeting agendas and minutes of the audit period and found that each committee engages in appropriate activities to fulfill its intended mission and the Board meets regularly and acts accordingly to provide meaningful guidance to DLC.

DLC maintains a Corporate Secretary whose role is to ensure that the initiatives of the Board are implemented. This employee, the Vice President, General Counsel &

Corporate Secretary, also oversees the regulatory compliance activities. Exhibit IV-1 shows the Regulatory Compliance business unit organizational structure.

Exhibit IV – 1
Duquesne Light Company
Regulatory Compliance Organizational Structure
As of December 2018



Source: Data Request EM-85

The Senior Manager, Internal Audit, is the leader of the IAD and reports administratively to the Vice President, General Counsel & Corporate Secretary. The AC of the Board retains the authority to hire, evaluate, and terminate the leader of the IAD, who is an employee of DQE, the parent company. The organizational structure of the IAD is shown in Exhibit IV-2. The bulk of the IAD's work is performing audits of DLC's business units; however, there are occasions when it provides service to some of DQE's other businesses as well.

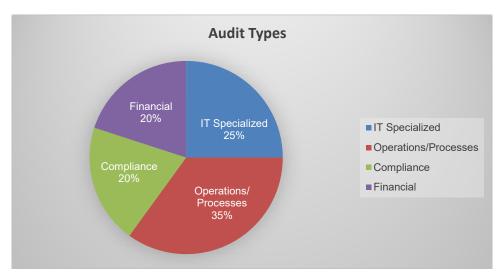
Exhibit IV – 2
Duquesne Light Company
Internal Audit Department Organizational Structure
As of December 2018



Sources: Data Requests EM-2 and EM-85

The IAD completes audits in four categories on an approximated percentage basis as shown in Exhibit IV-3. The audit plan is developed with input of executive management as well as the results of an annual risk identification and assessment exercise completed by the Enterprise Risk Management function. There is a rolling three-year "plan" that provides a general schedule of expected audit areas. These audit area may be adjusted as changes in business or control environments occur. Examples which could warrant adjustment to the plan include the implementation of new processes, procedures, or systems; personnel responsibility changes; or emergent matters identified by management. There is also consideration given as to whether the external auditor will need assistance provided by the IAD on any specific assignments as well.

Exhibit IV – 3
Duquesne Light Company
Internal Audit Workload Distribution
As of December 2018



Source: Data Request CG-6.1

DLC typically seeks competitive bids for external auditing services every five years but may renegotiate audit fees multiple times within a five-year period to ensure costs are reasonable within current market conditions. DLC underwent its most recent competitive bid process in 2014 and renegotiated audit fees in 2016. The next competitive bid process will be conducted in 2020. The Board has retained Deloitte & Touche LLP (Deloitte) for many years to perform its external auditing services due to Deloitte's specialization in public utility accounting; however, both the Board and Deloitte are committed to maintaining a proper partner rotation schedule to ensure auditor independence.

On January 1, 2013, the company issued Guidelines for Ethical Conduct. In September 2014, these guidelines were revised and reissued as the Policies for Ethical Conduct (Policy). The Policy was reviewed at least every two years throughout the remainder of the audit period. The most recent revision of the Policy defines the

company's position on 32 topics of conduct to clarify for the directors, officers, executives, and employees the expectations regarding ethical behavior. The Policy is re-emphasized with each employee during the annual refresher training held by the Corporate Compliance business unit.

Findings and Conclusions

Our examination of the Corporate Governance function included a review of the Board including the Board Committee structure and charters, policies and procedures, and the reporting relationships and operations of the internal and external auditors. Based on our review, DLC should initiate or devote additional effort to improving the efficiency and/or effectiveness of the Corporate Governance function by addressing the following:

1. The Audit Committee does not include a financial expert as defined by the Securities and Exchange Commission.

During the review of the Board Committees' meeting minutes and committee self-evaluations, the auditors noted that there was a concern discussed amongst the Board that there was not an Audit Committee (AC) financial expert, as defined by the Securities and Exchange Commission (SEC), within current membership as of May 2015. The SEC defines an AC financial expert as a person with:

- i. an understanding of generally accepted accounting principles and financial statements;
- ii. the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves;
- iii. experience preparing, auditing, analyzing, or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the registrant's financial statements, or experience actively supervising one or more persons engaged in such activities:
- iv. an understanding of internal controls and procedures for financial reporting;
 and
- v. an understanding of audit committee functions.

Because DLC is a privately-owned company, it is not required to comply with SEC regulations; however, having an AC financial expert on the Board is an industry-accepted best practice. Throughout 2017, the Board further discussed the issue and possible solutions. The Board contracted with its external auditor, Deloitte, to perform a survey of the current directors to determine if any would qualify to fulfill this role. Deloitte's evaluation confirmed that there were no current directors that would qualify as an AC financial expert. On December 6, 2017, the Board amended its AC Charter to remove the requirement for an AC financial expert.

Per discussions with a current director, the Board has contracted with a firm to help them develop a profile to be used when hiring an independent director in the future. This is a proactive strategy to prepare the Board to screen candidates should the need arise to replace the current independent director, or should it choose to hire additional independent directors.

The additional expertise as provided by an AC financial expert could provide more rigorous oversight of both the internal and external auditing functions. As a key example, an AC financial expert likely would have ensured DLC's Internal Audit Department (IAD) followed Institute of Internal Auditors (IIA) standards (see Finding and Conclusion No. 2).

2. The Internal Audit Department is not following Institute of Internal Auditors Standards 1300 and 2040.

The auditors inquired if DLC's IAD employees are members of the IIA and if the department conforms with the IIA's International Standards for Professional Practice in Internal Auditing (Standards). DLC confirmed that it maintains IIA membership for all its IAD employees and that the IAD conforms to the Standards. The audit staff requested to review the IAD's quality assurance and improvement program as is required by IIA Standard 1300. The Senior Manager, Internal Audit confirmed that the IAD does not maintain a quality assurance and improvement program that incorporates all elements of IIA Standard 1300. The auditors requested to review the IAD's policies and procedures manual as is required by IIA Standard 2040. The Senior Manager, Internal Audit explained that the IAD relies on its IAD Charter as its directing document as opposed to a policies and procedures manual. The IAD Charter outlines the mission and some general guideline statements; however, it does not include all elements necessary to guide the internal audit activity as defined in IIA Standard 2040.

Although DLC claimed that its IAD conforms with the Standards, the IAD was not in compliance with the aforementioned Standards. It is possible that this would not have occurred had an AC financial expert been serving on the Board to provide active oversight of the IAD (see Finding and Conclusion No. 1). The IAD will need to ensure it is compliant with IIA Standards 1300 and 2040.

Recommendations

- 1. Include within the profile currently being developed to hire an independent director the consideration criterion that a candidate may qualify as an SEC-defined AC financial expert.
- 2. Implement a quality assurance and improvement program that meets IIA Standard 1300 and its subcategories as well as prepare written policies and procedures for the IAD that provide guidance on internal audit activity that meets IIA Standard 2040.

V. AFFILIATED INTERESTS AND COST ALLOCATIONS

Background

This chapter presents the results of the auditors' review of the transactions between Duquesne Light Company (DLC or company) and its affiliates. As discussed in Chapter II – Background, DLC is an electric distribution utility headquartered in Pittsburgh, Pennsylvania, wholly owned by Duquesne Light Holdings, Inc. (DLH), an energy services holding company, which in turn is a wholly-owned subsidiary of DQE Holdings LLC (DQE). DLC's rates, services and other matters are regulated by the Pennsylvania Public Utility Commission (PUC or Commission) with respect to utility services provided within Pennsylvania. DQE's organization, as of August 1, 2018, is shown in Exhibit II-1 of the background chapter of the report. In addition to utility services, DLC also provides many non-utility services for itself and its affiliates (e.g., Finance). A standalone service company does not exist within DQE's corporate structure.

On June 18, 2018, DLC filed an updated administrative services agreement (Service Agreement) with the PUC, between DLC, DQE, and certain subsidiaries of DQE, for administrative, engineering, finance, legal, management and other services. The Service Agreement has yet to be approved by the PUC as of December 5, 2018. The Service Agreement updates DLC's Amended and Restated Administrative Services Agreement (explained later in this chapter) that was approved by the PUC on October 5, 2004 at Docket No. G-00960472. The update includes a list of services provided, updated organizational chart, and a description of cost allocation methods. Duquesne Light Energy, LLC (DLE), Duquesne Light Holdings, Inc. (DLH), DQE Communications (DQE Comm) are the affiliates listed in the Service Agreement with transactions to and from DLC. Services provided in the Service Agreement are detailed in Exhibit V-1.

Exhibit V – 1 Duquesne Light Company Services Provided per Administrative Services Agreement

Duquesne Light Company Accounting Audit Compliance • Finance Executive • Financial Planning & Analysis Human Resources Information Internal Audit Legal Materials Payroll & Disbursements Pension Administration Safety & Workforce Development Rent Security Tax Treasury

Source: Data Request No. Al-12

As shown in Exhibit V-2, total charges to affiliated companies for goods and services provided by DLC decreased from \$22.9 million in 2015 to \$8.9 million in 2017; a decrease of \$14 million or 61%. This decrease was driven primarily by DLC selling the customer contracts associated with Duquesne Light Energy (DLE) to a third-party in 2015. Previously, DLC was earning affiliated transmission revenues on power sales to

DLE customers. Additionally, lower tax refunds that were passed through from DLH for DLC's portion from 2015 to 2017 also contributed.

Exhibit V – 2
Duquesne Light Company
Charges to Affiliated Companies for Goods and Services Provided by DLC
For the Years 2015, 2016, and 2017

	2015	2016	2017	Percent Change
Duquesne Light Energy, LLC	\$9,600,000			-100.00%
DQE Communications, LLC	\$800,000	\$900,000	\$1,000,000	25%
Duquesne Light Holdings, Inc.	\$10,000,000	\$6,200,000	\$5,800,000	-42%
Administrative Cost Allocations	\$2,500,000	\$2,300,000	\$2,100,000	-16%
TOTALS	\$22,900,000	\$9,400,000	\$8,900,000	-61%

Source: Data Request Al-02 and Auditor Analysis

Exhibit V-3 shows total charges to DLC for goods and services provided by affiliated companies increased from \$9.9 million in 2015 to \$45.8 million in 2017; an increase of \$35.9 million or 362%. This increase was driven primarily by an increase in DLC federal tax sharing payments to DLH as governed by the Intercorporate Tax Payment Agreement approved by the Commission which is discussed later in more detail.

Exhibit V – 3
Duquesne Light Company
Charges to DLC for Goods and Services Provided by Affiliated Companies
For the Years 2015, 2016, and 2017

	2015	2016	2017	Percent Change
DQE Communications, LLC	\$3,100,000	\$3,100,000	\$3,200,000	3.20%
Duquesne Light Holdings, Inc.	\$6,800,000	\$2,000,000	\$42,600,000	526%
TOTALS	\$9,900,000	\$5,100,000	\$45,800,000	362%

Source: Data Request Al-02 and Auditor Analysis

The charges and allocated pass-throughs shown above in Exhibits V-2 and V-3 are covered by various agreements filed and approved by the PUC. The following paragraphs explain what these charges and allocated pass-throughs are for and descriptions of the agreements that cover them.

DLC provides administrative and general services for its affiliates. The charges for these services are based on an Affiliated Interest Agreement (AIA) dated July 19, 2004 and approved by the PUC on October 5, 2004 at Docket No. G-00960472. Services provided include management, supervisory, accounting and treasury, general administrative, insurance, legal and environmental services, materials management and

any other similar services on an "as available" basis. Any allocation to a specific affiliate of administrative services is charged as follows:

- Direct labor costs, rent, and material supplies of any employee of DLC who
 provides services to an affiliate will be charged to the affiliate based on the
 percent of time that the employee works on affiliated activities times the
 employee's compensation and benefits.
- Indirect labor costs working on projects that benefit DLC and affiliates will be charged based on how the projects benefit the entities. The Cost Allocation Manual (CAM) provides the different methods of allocation to apply to projects as they materialize.

Accounting and treasury costs such as financing costs, insurance, audit fees, tax services, etc., are allocated to DLC and affiliates on an asset's percentage basis. Other identifiable direct costs are charged to the affiliate at the actual cost incurred.

Listed below are individual business units, divisions, and groups of DLC that have provided administrative services to affiliates during the audit period:

- Technology provides computer hardware and software, and telecommunications support. Fees are based on pro-rata share of the cost of service provided.
- Human Resources provides compensation and benefits programs, medical screening, labor relations, management of personnel employment.
- External Affairs provides corporate liability and remediation management, policy and direction, auditing and compliance services, as well as legal services.
- Accounting & Treasury provides bank account and cash management expertise, assists with insurance requirements and provides collateral tracking, and pension plan services. They also provide accounting services, payroll, corporate disbursements, and plant accounting.
- Operations provides technical support and waste management training, provides management oversight and operational guidance at some investment sites.

Other AIAs include the following:

 Intercorporate Tax Payment Agreement - DLC participates in a tax sharing arrangement with DQE to provide for the payment of taxes for periods during which DQE and DLC are included in the same consolidated group for federal

tax purposes. This AIA was approved by the PUC on June 5, 2006 at Docket No. G-00051152.

- Pole Attachment and Duct Lease Agreement DLC collects pole and duct revenue from DQE Communications, LLC (DQE Comm). This AIA was approved by the PUC on August 14, 2013 at Docket No. G-2010-2217538.
- Master Fiber Services Agreement DLC and DQE Comm entered into an AIA that was approved by the PUC on February 26,1998 at Docket No. G-00970585 for DQE Comm to provide fiber optic communications for DLC.
- Debt Agreement An AIA is maintained between DLC and DLH that authorizes short-term borrowings up to \$200 million at market rates from DLH to DLC. This AIA was approved by the PUC on May 3, 2010 at Docket No. G-2009-2148505. As of March 31, 2018, zero borrowings were outstanding under this AIA.

DQE has a CAM used as a policy for documenting the methodologies for directly charging and allocating costs between affiliates of DQE. The CAM was completed in accordance with the National Association of Regulatory Utility Commissioners (NARUC) Guidelines for Cost Allocations and Affiliate Transactions. The CAM is reviewed by the Finance business unit at least once every 24 months and updated as necessary. Appendices associated with the CAM are updated with the CAM on an as-needed basis.

The Finance business unit provides annual DQE-wide communication to reinforce important requirements and responsibilities outlined in the CAM. In addition, materials are included in the new employee on-boarding program and the Communications group disseminates CAM updates to employees twice a year on various platforms. In addition, it is the responsibility of each cost center manager to communicate the CAM to new employees and to monitor their respective cost centers for expenses that should be allocated to affiliates. These expenses are to be communicated to the Finance business unit in a timely manner as new allocations arise to ensure proper allocation.

A CAM review dated February 2016 was completed by the Internal Audit Department. The objectives of the review were to determine:

- if appropriate time entry by employees is occurring;
- if DQE materials, assets, rent, insurance were allocated correctly based on the CAM:
- if DQE is tracking, reviewing, and allocating costs to affiliates on a monthly basis; and
- how DQE is communicating the CAM to employees.

The internal audit had three findings (two significant and one best practice) with action plans of how DLC would address them.

At the beginning of each year, DLH expenses are reviewed to ensure all are properly accounted for in the allocation process that benefit both DLH and its affiliates. A methodology for each allocation is developed if direct charging is not practicable. The Non-Regulated Accountant trues up any variances from the preliminary estimates based on asset allocation percentages annually. The Manager of Accounting reviews the allocation. Common allocated costs include letter of credit fees, rating agency fees, bond issuance costs, bank service charges, audit fees, insurance, tax and legal services, and other miscellaneous services.

DLC employees allocate their time to DLC and affiliates. The Manager of Accounting uses the data they provide to allocate payroll, fringe benefits and other expenses to DLC and affiliates. Executive time is allocated through the same process.

In the past, DLC's accounting records were maintained on SSA Global's general ledger package. DQE and its subsidiaries (excluding DQE Comm) are implementing a new general ledger package called Oracle Fusion, expected to be in place in the 4th quarter of 2018. Most of DLC's financial reports are generated from Microsoft Dynamics software. Reports can be prepared after DLC's monthly financial close process. Other reports are derived from other software programs and/or Microsoft Excel. DLC implemented new accounting software (Oracle Fusion) during the audit period. Full implementation was completed in October 2018. In addition, DLC is also implementing a Work Order Management System that will integrate with the new accounting software. This implementation is expected to be complete in the second quarter of 2019.

DLC is a separate legal entity from DLH, receives its own credit rating from Standard & Poor's and Moody's, and can independently raise capital via external markets. Other ring-fencing measures include:

- DLC's Articles of Incorporation limit it from declaring or paying dividends on any shares of capital stock ranking junior to DLC's preferred stock if the common stock equity of DLC is less than 25% of total capitalization.
- DQE appointed a locally based, independent director to the Board of Directors (Board) to ensure that best practices in corporate governance are followed and corporate decisions reflect the interests of the local community.
- DLC does not participate in a cash pool with DQE or other affiliates that are not regulated by the PUC. As a result, non-regulated affiliates cannot use DLC's surplus cash for their operations.
- DLC does not guarantee the debt or credit instruments of DQE or any affiliate not regulated by the PUC, except as approved by the PUC upon a determination that such guarantee provides net benefits to customers.

- DLC does not grant a mortgage or other lien on any property used and useful by DLC in providing retail utility service to the public subject to the PUC's jurisdiction, except for the financing needs of DLC.
- DLC does not make any loan or otherwise extend credit to DQE or any
 affiliate not regulated by the Commission for a term of one year or more,
 except as approved by the PUC upon a determination that such loan or credit
 extension provides net benefits to customers.
- DQE will not permit a change in ownership among its members without prior PUC approval if such a change would result in a change in control under the then-applicable PUC standards.
- DLC must seek PUC approval of all new or amended agreements with affiliates consistent with Chapter 21 of the Public Utility Code.
- DLC will continue to have outstanding separately issued debt held by investors not affiliated with DLC or its affiliates, unless the PUC authorizes to the contrary.
- DLC's long-term debt ratio as a percentage of total capitalization shall not exceed 60% without approval from the PUC.
- DLC must notify the PUC of its intention to declare a special cash dividend to DLH at least 30 days before declaring the dividend.
- The Chief Executive Officer of DLC will be a member of the Board, and will also chair a management committee, which will contain representatives of both the senior management team and the ownership consortium.
- DQE and its subsidiaries (including DLC) maintain separate books and financial records.
- DQE maintains corporate organizational and financial policies sufficient to permit DLC to continue to meet requirements to maintain its own credit ratings, separate from DQE.
- DQE and its subsidiaries will remain organized in a manner that provides corporate separation of regulated and non-regulated activities.

Findings and Conclusions

Our examination of the Affiliated Interests and Cost Allocations function focused primarily on a review of contracts and agreements governing transactions among affiliates, cost allocation methodologies, training efforts, compliance with existing allocation policies and practices, a review of ring-fencing efforts, competitive safeguards, etc. Based on our review of DLC'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

VI. FINANCIAL MANAGEMENT

Background

As previously discussed in Chapter II – Background, Duquesne Light Company (DLC or company) is a wholly-owned subsidiary of Duquesne Light Holdings LLC (DLH), an energy services holding company, which in turn is a wholly-owned subsidiary of DQE Holdings LLC (DQE). Under the direction of DLC's Controller and Treasurer, the company's Finance business unit is divided into the following groups: Financial Planning & Accounting; Financial Projects, Accounting/Reporting; Taxes; Financial Modeling/Valuation; Payroll & Disbursements; Treasury; and Insurance. As shown in Exhibit VI-1, both the Controller and the Treasurer report to the Senior Vice President and Chief Financial Officer (CFO).

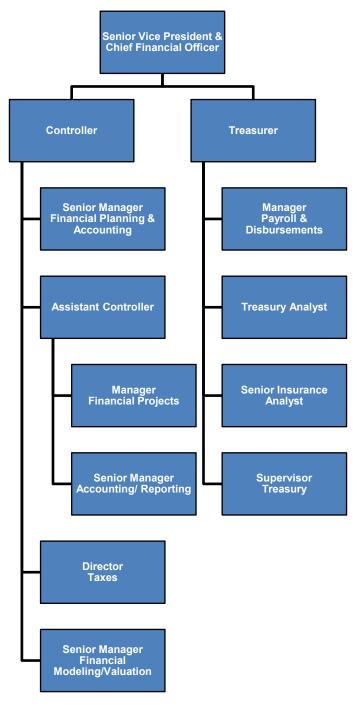
The Financial Planning and Accounting group analyzes profit-and-loss income statements, and prepares reports and recommendations to management; generates forecasts and analyzes trends in sales, finance and other areas of business; researches economic progressions to assist DQE's financial planning; creates financial models of "what if" scenarios for future business planning decisions; develops reports for management on the overall performance of business segments; and develops metrics to measure characteristics of the business.

The Manager, Financial Projects oversees the planning and implementation of new finance initiatives and processes; leads and coordinates all aspects of financial projects; and utilizes expertise and leadership skills to direct staff and resolve issues to ensure project goals are met.

Accounting, within the Accounting/Reporting group, performs the preparation, maintenance and reconciliation of ledger accounts and financial statements; prepares, records, analyzes and reports accounting transactions and ensures the integrity of accounting records for completeness, accuracy and compliance with accepted accounting policies and principles; provides financial support including forecasting, budgeting, and analyzing variations from budget; and conducts or assists in the documentation of accounting projects. Reporting, within the Accounting/Reporting group, supports financial decision-making information by collecting, analyzing, investigating and reporting financial data; ensures compliance with current and emerging accounting pronouncements; leads the production of external reporting documents and coordinates reporting activities; analyzes and prepares regulatory accounts and financial statements and reports; and conducts or assists in the documentation of accounting projects.

The Tax group prepares and maintains tax records, returns, reports and other related materials; provides income tax accounting for financial statements and regulatory reporting; participates in the development and implementation of tax strategy; minimizes tax liability using a thorough knowledge of tax laws and regulations; recommends alternative tax treatments to alleviate or reduce tax burden; and manages governmental audits and tax controversy matters.

Exhibit VI – 1
Duquesne Light Company
Finance Organization
As of December 5, 2018



Source: Data Request EM-02

The Financial Modeling/Valuation group develops models to quantify the competitive performance of business segments, evaluates potential operational changes, and designs new approaches and methodologies; defines problems, collects

data, applies advanced economic and mathematical concepts, collects facts and draws valid conclusions; recommends solutions to new and complex problems by developing innovative strategies, quantifies the competitive performance of DLC's operations and/or markets, evaluates the potential impact of changes, and reports on economic forecasts that affect the industry; develops reports for management on the overall performance of business segments and develops metrics to measure characteristics of the business; analyzes historical operations and market information using business and statistical software, and develops models to predict future outcomes; analyzes profit-and-loss income statements, and prepares reports and recommendations to management, and creates financial models of "what if" scenarios for future business planning decisions.

The Payroll & Disbursements group prepares, records, verifies, analyzes and reports accounts payable/receivable transactions; pays vendor invoices and prepares customer billings on a timely basis; maintains and reconciles accounts payable/receivable ledger accounts, financial statements and reports; prepares, documents and disburses payroll checks, payroll taxes and employee benefit payments; prepares analyses and reconciliations to detect fraud; administers corporate payables programs; prepares reports illustrating payables/payroll expenditures and receivable revenues; evaluates current systems, and recommends and develops operating efficiency improvements.

The Treasury group performs operations involving cash funds, foreign exchange, debt and capital management; and provides analytical and technical support for treasury-related activities.

The Insurance group develops, recommends and administers risk management and loss prevention programs, such as property and casualty insurance and product liability service, to attain maximum protection at the most economical rates.

DQE's fiscal year is based on a calendar year. The business planning process for the upcoming fiscal year begins in early May and lasts until early December. Senior management's review of operations and maintenance (O&M) and capital budgets takes place from early June through early July. These budgets are initially presented to the Business Plan and Budget Review (BP&BR) Committee of the DQE Board of Directors (Board) in mid-October (two days) and mid-November (one day) as part of the overall business plan. Finally, the business plan, including the O&M and capital budgets, is approved in early December by the BP&BR Committee and the Board.

At the beginning of each calendar year, the Board approved business plan is uploaded into DLC's budgeting and accounting software. This upload allows the reporting of actual to budgeted variances. As part of the monthly accounting close, DLC's accounting group prepares, approves and records actual general ledger activity into DLC's general ledger software. Throughout the accounting close process, actual results are monitored and reviewed. A portion of this review is investigating budget to actual variances that exist within income statement and balance sheet accounts.

As part of the accounting close (six-day process), the accounting group alerts cost center managers when expense information (comparing actual to budget) is

available for their review. These alerts are distributed twice during the close process. The first alert is sent as preliminary on the third day of the accounting close, and then a final alert is sent once the close process has been finalized. Variances and adjustments are accumulated and recorded between the third day and the finalization of accounting close which is typically on the sixth day. These variances and adjustments are initiated either by the accounting group reaching out to cost center owners or the cost center owner reaching out to the accounting group. DLC's total O&M and capital budgets are approved annually by the Board, and the total budgeted O&M and capital expenditures are also used as Key Performance Indicators (KPI). KPIs, when met, contribute to bonuses for employees.

Short-term borrowings are made under a \$175 million DLC revolving credit facility (RCF) or through a short-term borrowing facility with DLH. There are ten banks that lend to the DLC RCF. In addition, one of the banks that is a member of the RCF credit agreement supplies stand-alone letters of credit to DLC. The short-term intercompany borrowing facility was approved by the PUC at Docket No. G-2008-2060987 and amended at Docket No. G-2009-2148505. Short-term borrowings made under both the RCF and intercompany facility are typically made for working capital purposes or other short-term general corporate purposes.

Whenever DLC has excess cash, the funds are temporarily invested in one or more money market funds. DLC maintains a short-term investment account with BNY Mellon for temporarily depositing excess cash in government money market mutual funds. DLC attempts to maintain a diversified portfolio of government and prime funds with no more than \$30 million invested in a single fund at any one time and can be redeemed overnight as needed by DLC.

Exhibit VI-2 shows a schedule of all outstanding long-term debt as of May 1, 2018 for the company. DLC no longer has any outstanding preferred stock or long-term intercompany loans with DLH. DLC obtains long term financing through first mortgage bonds with interest payments paid on a semi-annual basis. The company issues its own debt securities and; therefore, it has its own credit rating. A credit rating by Moody's as Baa3 or higher is considered investment grade. Moody's Investors Service (Moody's) corporate credit rating for DLC was A3 as of January 30, 2018.

DLC's net income and dividends for the years 2015 through 2017 are shown in Exhibit VI-3. The dividend amounts, which were paid to DQE, were not excessive (lower than 85%) and did not necessitate explanations to be submitted to the PUC. DLC's interest coverage ratio over the same period was very strong as shown in Exhibit VI-4. Analysts typically prefer to see a ratio of 3.0 or better.

Exhibit VI – 2 Duquesne Light Company First Mortgage Bonds Payable As of May 1, 2018

Туре	Issuance Date	Amount	Maturity Date	Interest Rate
First Mortgage Bond	2/3/2012	\$ 200,000,000	2/3/2042	4.76%
First Mortgage Bond	11/14/2013	\$ 160,000,000	11/14/2043	4.97%
First Mortgage Bond	2/4/2014	\$ 45,000,000	2/4/2044	5.02%
First Mortgage Bond	2/4/2014	\$ 85,000,000	2/4/2054	5.12%
First Mortgage Bond	3/2/2015	\$ 100,000,000	3/2/2045	3.78%
First Mortgage Bond	3/2/2015	\$ 200,000,000	3/2/2055	3.93%
First Mortgage Bond	10/3/2017	\$ 160,000,000	7/15/2045	3.93%
First Mortgage Bond	2/1/2018	\$ 60,000,000	10/3/2047	3.82%
First Mortgage Bond	2/2/2018	\$ 60,000,000	2/1/2048	3.89%
First Mortgage Bond	2/1/2018	\$ 125,000,000	2/1/2058	4.04%
First Mortgage Bond	12/14/2006	\$ 44,250,000	11/1/2029	4.50%
Total Long-Term Debt		\$ 1,239,250,000	Average Interest Rate	4.34%

Source: Data Request FM-5

Exhibit VI – 3 Duquesne Light Company Dividend Payout Ratio For the Years 2015 through 2017

	2015	2016	2017
Net Income (millions)	\$121.4	\$118.6	\$130.5
Dividends Paid (millions)	\$93.6	\$91.0	\$89.0
Dividend Payout Ratio*	77.1%	76.7%	68.2%

*Dividends paid as a percentage of net income Source: Data Request FM-21

Exhibit VI – 4
Duquesne Light Company
Interest Coverage Ratio
For the Years Ended 2015 through 2017

	2015	2016	2017
EBITDA (millions)	\$384.6	\$377.9	\$407.5
Interest Expense (millions)	\$58.1	\$48.8	\$49.8
Interest Coverage Ratio	6.6	7.7	8.2

EBITDA = Earnings before interest, taxes, depreciation, and amortization

Source: Data Request FM-27

The funded status of DLC's Defined Benefit Retirement Plan (Retirement Plan) is shown in Exhibit VI-5. DLC's Retirement Plan and Other Post-Employment Benefits (OPEB) Plan (explained later in this chapter) are administered by DLC, who is the named fiduciary and the plan administrator. The Bank of New York Mellon is the trustee of DLC's pension plan. DLC also maintains an internal Pension Investment Committee and a Retirement Plans Policy Oversight Committee to act in additional fiduciary capacity. The Bank of New York Mellon is the sole trustee of DLC's OPEB Voluntary Employees Beneficiary Associated (VEBA) trust.

Exhibit VI – 5
Duquesne Light Company
Retirement Plan Funding Status
As of January 1, 2016, and 2017

	January 1, 2016	January 1, 2017
Projected Benefit Obligation (\$000)	\$1,119,576	\$1,154,917
Fair Value of Assets (\$000)	\$875,825	\$914,142
Funded Status	78.2%	79.2%

Source: Data Request FM-23

DLC's contributions to its Retirement Plan are typically the larger of either the minimum amount required under the Pension Protection Act of 2006 (PPA) or the amount required to fulfill regulatory commitments. The company also reviews the opportunity to make additional voluntary pension contributions to offset service costs as to not degrade the Retirement Plan's funded status. It should also be noted that as part of its rate case settlement agreement on January 16, 2014 at Docket No. R-2013-2372129, DLC was required to contribute \$37.2 million to its pension trust annually². DLC's projected Retirement Plan contributions for the next five years (2019 through 2023) are about \$10 million per year.³

DLC currently accounts for and funds OPEBs through a VEBA trust, into which the company deposits the full amount of annual costs calculated by their external actuary. Retiree OPEBs and administrative costs of maintaining the trusts and/or accounts are paid from the amounts deposited in the trust. As required by the PUC, the company has established and funded OPEB benefit payments through a VEBA trust since 2007. The VEBA trust is largely a pass-through. When the actuarially determined cost for any year exceeds actual benefit payments, the excess cash is left in the VEBA account. Conversely, when the actuarially determined cost is lower than actual benefit payments, DLC may withdraw funds from the VEBA. In 2015, OPEB benefit payments exceeded actuarial costs making the entire VEBA account balance eligible for withdrawal. In March 2016, all VEBA investment accounts were closed and related

² Settlement agreement provisions have been established for any annual contributions that fall below the threshold of \$37.2 million.

³ The Settlement Agreement in DLC's most recent base rate case, at Docket No. R-2018-3000124, provides in part at paragraph 37: "Commencing with calendar year 2019, Duquesne Light will deposit into its pension trusts an amount equal to \$10 million per year; provided, however, that contribution(s) in any year in excess of the foregoing may be used on a cumulative basis to satisfy future contribution obligations under this Settlement."

funds were withdrawn, leaving a \$10,000 balance in each of the VEBA cash accounts for union and management. Remaining balances are expected to cover taxes and fees without additional funding. The VEBA is currently operated on a pay-as-you go basis funded through collections from rate payers. In the event of over-collection, any excess will be placed in the VEBA trust.

The Treasury group utilizes Treasury Work Station (TWS) which is owned by Fidelity National Information Services, Inc. TWS allows tracking of all cash management transactions, loading of daily bank files, and viewing of cash positions by DLC, affiliate and account on any given day. Reports for financial reporting and management information are prepared daily and can also be produced on demand.

Capital markets and other relevant utility sector data is sourced from two financial data vendors, as well as from external experts such as DLC's banking group. DLC has one Bloomberg terminal available for use by all company employees. SNL is a web-based product of S&P Global Market Intelligence, which provides sector-focused news, data and analytics. Reports for financial reporting and management information are prepared on a monthly, quarterly or annual cycle, and can also be produced on demand.

Findings and Conclusions

Our examination of the Financial Management function focused primarily on a review of accounting policies and procedures, the capital and O&M budget process, budget variance tracking and reporting, capital structure, long-term and short-term financing, the pension plan, and dividend policies. Based on our review, DLC should initiate or devote additional effort to improving the efficiency and/or effectiveness of its Financial Management function by addressing the following:

1. Administrative controls are not consistently applied to all accounting and finance policies and procedures.

As part of the audit fieldwork review, the auditors noted although the majority of DLC's accounting and finance policies and procedures had responsible parties and scopes listed that exceptions occurred to this practice. The specific policies and procedures, descriptions of their purpose, and details of concern to the audit staff are as follows:

• Liquidity Management, Sources of Risk – This procedure is meant to note that sources of risk are evaluated within DQE. It is noted in the policy that: "these risks are reviewed monthly and identified as part of the cash forecasting process as appropriate". Consequently, DLC contends that it does not require a scope or responsible party to be specifically identified and the scope and responsible party are outlined in their cash forecast process policy. Procedures in this policy weigh the risks identified in the Liquidity Management, Sources of Risk procedure and build them into the overall cash

forecasting process, but it has no responsible parties or scope. A responsible party should not be implied but clearly referenced to another policy or procedure.

- Liquidity Management, Liquidity Instruments According to DLC, the scope is defined in the language as it identifies the various liquidity arrangements DQE has by legal entity (DLH and DLC revolving credit facilities). The procedure does not require a responsible person as it is written. It instead only identifies the arrangements that exist within DQE. The management of the arrangements described in Liquidity Management, Liquidity Instruments can be referenced in procedures such as Liquidity Management, Sources of Risk which outlines a responsible party for determining the appropriate liquidity needs of DQE. A scope should not be implied from the language within, but expressly stated for that specific policy or procedure. A responsible party should also be expressly identified.
- Pension Investments, Investment of Pension Funds According to DLC, the
 responsible party is not specifically identified in this policy. However, the
 policy states that the "Statement of Investment Guidelines" should be
 referenced. These guidelines indicate that the Compensation Committee is
 responsible for the selection of the investment direction and that they
 delegate responsibility to execute on the direction to the Investment
 Committee (includes CFO, VP HR, Treasurer, Tax Director and Director of
 Operations Work Management and Performance). A responsible party
 should not be implied from another policy or procedure, but expressly stated
 for that specific policy or procedure.
- Annual Budget Preparation, Adding Users Prophix⁴, which is described in the procedure, is applicable to DQE so the scope is implied, according to DLC; however, this is not described anywhere in the procedure. Additionally, the procedure states that approval is necessary from the Senior Manager of Financial Planning indicating the responsible party according to DLC; however, this individual is not listed as a responsible party. A responsible party and scope should not be implied, but expressly stated.
- Financial Planning Implementation (FPI) System Administration, Access for Users in FPI⁵ – DLC stated that FPI is a company specific term which indicates the entity DLC because only DLC data is housed in FPI; however, this is not explained in the procedure. The scope is implied, according to DLC. A responsible party and scope should not be implied, but expressly identified.
- Financial Planning Implementation (FPI) System Administration, Reports in FPI – DLC stated that FPI is a company specific term which indicates the

⁴ Prophix is a company that provides corporate performance management software and applications. Prophix was replaced in May 2018 when DLC implemented a new budgeting software, Oracle EPBCS.

⁵ FPI was replaced in May 2018 when DLC implemented a new budgeting software, Oracle EPBCS.

entity DLC because only DLC data is housed in FPI; however, this is not explained in the procedure. The scope is implied, according to DLC. With regards to the responsible party, there is not one responsible party for this procedure, according to DLC. This report is accessed by each cost center manager for review which allows for many responsible parties and none that are listed as responsible parties. A responsible party and scope should not be implied, but expressly stated.

- Monthly Reporting Requirements, Management Book Reports The scope is not noted in the procedure, but it is implied, according to DLC, that all entities ("Applicable to all Companies") will be provided these budgeted materials. A scope should not be implied, but expressly stated.
- Dividend Policy This policy has both a scope and a responsible party, but they exist as one group. The responsible party is noted as being the Treasury Operations group. Each (Cash Management Analyst, Supervisor of Cash Management, and Treasurer) is involved and necessary in the dividend wiring process so noting them as the responsible party collectively is appropriate, according to DLC. Another dividend policy was given to the auditors that stated that the CFO determined what the timing and the amount of the dividend payout would be and if it would be approved and considered declared and payable by the Board. One person ultimately should be responsible for the wiring process. Preferably, this would be the highest-level employee within Treasury Operations, which is the Treasurer.

In addition, some policies/procedures are written as the responsibility of generic employees, business units, divisions, departments, or groups that were unlike the other accounting and finance policies/procedures provided to the auditors that had one definitive employee, or list of specific employees responsible. These policies/procedures are:

- Internal Control Environment
- Disclosure of Confidential Information
- Access to Finance Information Systems
- Record Retention
- Code of Conduct
- Service Organization's Report
- Interim Financial Reporting (Monthly and Quarterly) Monthly Closing Process and Supplemental Quarter Closing
- Complete and Accurate Accounting Entries Non-Regulated and Regulated Accounting – Manual Journal Entries
- Cash Equivalents
- Allowance for Funds Used During Construction
- Net Salvage Value
- Contribution in Aid of Construction
- Guarantees
- Miscellaneous Revenue Credit Policy

- Shareholder Payments Quarterly Dividend Declaration
- Revenue Recognition
- Payroll Processing System Security
- Treasury Finance Plan
- Capital Markets Management
- Debt Compliance
- Wholesale Credit Management
- Credit Ratings Management
- Bank Relationships
- Liquidity Management
- Financial Planning Implementation System Administration Entering and Approving Forecast Data in FPI
- Valuation Model Preparation & Maintenance
- Balanced Scorecard Process
- Weather Normalization
- Throughput Forecasting

During audit fieldwork, DLC provided policies and procedures from other departments that exhibited the internal standards that the Finance business unit policies and procedures lacked. More specifically, the auditors were provided with a companywide policy (Acceptable Use of Electronic Resources Policy) that included sections of Purpose, Roles and Responsibilities, References and Related Documents, and Document Control Record that was clearer and more informative than what was provided by the accounting and finance departments. The purpose section included the scope of the employees the policy applies to and explained in detail what various terms mean and refer to that could be unclear to someone unfamiliar with the policy. The roles and responsibilities section broke all roles/responsibilities down by the employment level or job title within DLC and included a description of training and enforcement related to the policy. A references and related documents section listed which other DLC policies/procedures are mentioned or connected. Finally, the document control record section showed which department issued the policy, who it was distributed to, implementation, communication and training information, and a policy review schedule. The final portion of this section included policy approval job titles, signatures and a date along with a policy history of revisions made, who approved them and the date.

DLC stated that their accounting and finance policies and procedures are updated each year and that each policy and procedure must be signed off electronically in their SharePoint system by the individual denoted as being responsible, or the manager of the applicable group noted. However, the responsible individual, or manager or higher-level employee of the applicable group is not always listed on the policies and procedures nor was a procedure governing this practice provided to ensure proper controls have been established. A review is performed to be sure each policy and procedure is signed off electronically by the end of each year; however, a physical signature on the document itself is not required.

DLC agreed to update the accounting and finance policies and procedures to reflect process changes associated with the implementation of the financial system replacement (Oracle) which was completed in October 2018, or at the next annually conducted policy and procedure manual review in 2019. DLC stated that they will provide additional detail to clarify the responsible parties and the scopes of each policy and procedure.

Policies and procedures that do not specifically state who is responsible, and/or do not have a scope can lead to confusion and a lack of accountability. In addition, all policies/procedures should have a single employee who is ultimately responsible. If multiple employees in a department are involved with the policy/procedure, the leadership of the department should be the ultimate person responsible and stated as such.

2. Duquesne Light Company does not have a formal variance policy.

Monthly operating and maintenance (O&M) and capital budget reports used by management to evaluate performance were provided for review. Budget line items did not have variances calculated and there were no written explanations for significant variances found in these O&M and capital budget reports.

In each division/group's monthly report there were some significant variances by cost center, line item, and total (percentage and dollar amount) that did not have explanations. From 2013 to 2017, 20 of 57 (or 35%) departments/divisions within the O&M budget had variances greater than over/under 10% which ranged from \$241,000 to \$15.5 million. Similarly, 26 of 39 (or 67%) capital budget line items had variances over/under 10% which ranged from \$1.2 million to \$47.3 million during the same period. DLC also had an "Other" category within each O&M yearly budget that contained several millions of dollars (actual and budgeted) spending with large variances that ranged from \$4.6 million to \$20.7 million each year.

According to DLC, the company has no threshold for variance explanations. DLC contends that, although explanations to budget variances are not documented in the monthly budget reports used by management, all budget variances are discussed through the following processes:

- DLC's Financial Planning group is responsible for running a series of reports that accumulate variances between actual and budgeted expenses. These reports are distributed monthly to each DLC business unit (i.e., Finance, Office of General Counsel, Customer Service, Communications, Senior Management, Supply Chain, Human Resources and Operations) for review.
- Finance business unit employees meet monthly with senior leadership from every other business unit to discuss both O&M and capital expense variances. In addition to noting variances to the budget, Finance business unit employees challenge every other business unit to create a reforecast of their expected spending for the remainder of the year.

- O&M and capital variances are also discussed at DLC's Business Review Meetings and distributed through the internal Business Review Book.
 Insights gathered via the meetings discussed above are discussed with the CEO, CFO, and VPs.
- Lastly, results are consolidated monthly at a DLC level and presented to the Board's Asset Management Committee (AMC). Explanations are summarized in these materials and the results are subject to questioning from the AMC. DLC believes the monthly budget review process and meetings with the AMC are sufficient for addressing budget variances.

The company contends that establishing thresholds for documenting budget variance explanations will limit which variances are questioned. The auditors disagree. Establishing a policy for documenting explanations for significant variances (e.g., variances exceeding plus/minus 10% from budget or any variance exceeding a certain dollar amount) doesn't prevent DLC from continuing its current practice. The requirement to document significant variance explanations in budget reports used by management will enhance the current process by enhancing accountability and creating a historical context to help evaluate performance, as well as preventing items from being overlooked.

A formal variance policy should be developed and implemented that includes thresholds (percentage and/or dollar amounts) to require budget variance explanations to be documented to have a record of present and past performance. This information could be used to create more accurate budgets and forecasts in the future. Funding could be used within other cost centers with improved information to identify trends. Unnecessary borrowing or missed investment opportunities could result from allocating funding where it is not needed.

Recommendations

- 1. Conduct a review of all finance and accounting policies and procedures to ensure administrative controls are standardized and applied uniformly.
- Create a formal variance policy that includes a threshold (percentage and/or amount) for variances to be tracked and explained through documentation.

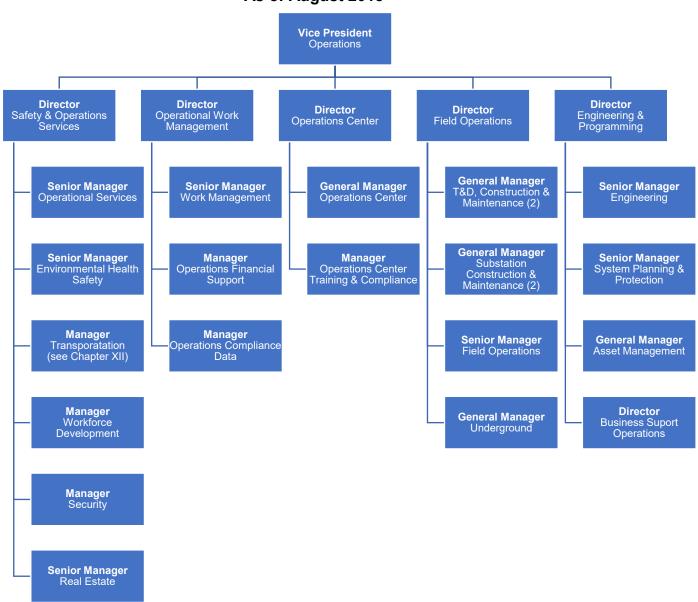
VII. ELECTRIC OPERATIONS

Background

Electric Operations (EO) functions at Duquesne Light Company (DLC or company) are performed under the direction of the Vice President of Operations who oversees the following groups, and respective subgroups, that fall within the scope of the audit: Safety & Operations Services, Operational Work Management, Operations Center, Engineering & Programming and Field Operations (see Exhibit VII-1 for the EO organizational chart). These groups have the responsibility to perform the following tasks to support the Vice President of Operations:

- Safety and Operations Services collaborate with other EO functions to develop and implement technical trainings; develop environmental, health and safety programs and procedures to safeguard employees and community; oversight of inspection and maintenance (I&M) of company facilities; control and direct real estate activities, including right-of-way (ROW) easements; develop and enforce policies and procedures to protect company employees, properties and materials.
- Operational Work Management coordinates input from EO functions to facilitate the integration of individual business unit plans with the corporate plan; control and manage budgeting and operational data for regulatory compliance.
- Operations Center controls the company's supervisory control and data acquisition (SCADA) round-the-clock operation; maintains real-time compliance with reliability standards set by regulatory authorities; manages resources for transmission and distribution outages to ensure availability of skilled resources.
- Field Operations manages the construction and maintenance of overhead and underground electric transmission and distribution (T&D) facilities and equipment; schedules and coordinates testing of substation equipment; develops and maintains the company's I&M program and related regulatory data; provides field information to the customer service business unit and/or Operations Center to keep affected customers properly informed.
- Engineering and Programming plans, designs and estimates time and cost
 of construction and maintenance of structures, facilities, systems and
 components; monitors internal projects from initiation to completion, including
 contracted work; develops and applies engineering standards and
 procedures; maintains the geographical information system database,
 application and tools; manages vegetation and forestry electrical line
 clearance.

Exhibit VII – 1
Duquesne Light Company
Electric Operations Functional Organization
As of August 2018



Source: Data Request EM-2

DLC has a total of five operating areas within its service territory encompassing Allegheny and Beaver counties and covering about 817 square miles. DLC separates its service territory into five operating areas (shown in Chapter II – Background, Exhibit II-2): Preble (City of Pittsburgh), McKeesport (Southeast), Penn Hills (Northeast), Edison (North) and Raccoon (Northwest). Each operating area has a centrally located service center and garage to operate out of daily. The current geographic service territory has been in place since 2007, and DLC does not foresee any changes to it soon. Typical work at the service center level includes maintenance, emergency

restoration, customer commitments (i.e., fulfilling customer requests), and capital work, in conjunction with contracted work, when needed.

The Amended Reliability Benchmarks and Standards for the Electric Distribution Companies (EDCs) at Docket No. M-00991220 issued May 7, 2004, established the current 12-month standard, 36-month standard, and benchmark performance for three reliability indices. These indices measure the EDC's frequency and duration of outages at the system or customer level, excluding outages associated with major events. Definitions of the reliability indices reported by the company are as follows:

- System Average Interruption Duration Index (SAIDI) The average duration of sustained interruptions (measured in terms of load by DLC) per total system load connected during the analysis period. It is the average duration time of sustained interruptions in the system for the period. Sustained interruptions are outages lasting more than five minutes.
- System Average Interruption Frequency Index (SAIFI) The average frequency of sustained interruptions per total system load connected during the analysis period.
- Customer Average Interruption Duration Index (CAIDI) The average interruption duration of sustained interruptions for those customers who experience interruptions during the analysis period. It is the average time required to restore service to the average customer experiencing a sustained interruption.
- Benchmark performance An objective level of performance that an EDC should strive to achieve and maintain. As currently established, benchmark performance represents the statistical average of the EDC's annual, systemwide reliability performance for the five-year period of 1994-1998.
- Standard A numerical value that represents the minimum level of accepted performance for each reliability index for a given EDC. Performance standards are based on the established benchmark for each EDC. There are two standards:
 - Rolling 12-month standard 120% of benchmark (for major EDCs including DLC)
 - Rolling 36-month standard 110% of benchmark
- Major event Either an interruption beyond the control of the EDC which
 affects at least 10% of the customers in the EDC's service territory during an
 event for a duration of five minutes or greater, or an unscheduled interruption
 of electric service resulting in an action taken by an EDC to maintain the
 adequacy and security of the electric system.

DLC's standards, benchmarks, and actual performance for 2014 through 3rd quarter 2018 are displayed in Exhibit VII-2. Regarding all three reliability indices, DLC should be striving to maintain each index as low as possible. When an EDC's performance does not meet its Commission established performance standard, the Public Utility Commission (PUC) may, as deemed necessary, require additional reporting by the company and more closely monitor its corrective measures. Therefore, the EDCs should maintain benchmark or better reliability performance as set forth in the Commission's Order. As shown in Exhibit VII-2, from 2014 through 3rd quarter 2018, Duquesne Light successfully sustained its electric reliability performance at or better than the required levels.

Exhibit VII – 2
Duquesne Light Company
Electric Reliability Performance
For the Years 2014 – 2017 and 3rd Quarter 2018

Year	SAIDI	SAIFI	CAIDI
2014	63 minutes	0.62	102 minutes
2015	71 minutes	0.69	103 minutes
2016	69 minutes	0.69	100 minutes
2017	112 minutes	0.98	115 minutes
3Q 2018	95 minutes	0.82	116 minutes
36-Month Avg (2015 – 2017)	84 minutes	0.79	106 minutes
Benchmark	126 minutes	1.17	108 minutes
Rolling 12-Month Standard	182 minutes	1.40	130 minutes
Rolling 36-Month Standard	153 minutes	1.29	119 minutes
Formula*	[(ΣkVA-minutes interrupted) – kVA-minutes impact of major events] / System Connected kVA	[(∑kVA interrupted) – kVA impact of major events] / System Connected kVA	SAIDI / SAIFI

*DLC measures interruptions based upon kilovolt-amp (kVA) load

Source: PUC Annual Reliability Reports

Exhibit VII-3 shows the company's capital and operation and maintenance (O&M) expenditures for the period 2014 to November 2018. During this period, DLC had increased its capital expenditures to replace aging infrastructure and invest in modernizing equipment as needed. The O&M expenditures reflect DLC's O&M plan to inspect and maintain existing equipment to ensure safe and reliable delivery of electricity. The increase in O&M expenditures in years 2016 and 2017 resulted from additional projects related to energy efficiency programs and technology projects.

Exhibit VII – 3 Duquesne Light Company Capital and Operation & Maintenance Expenditures For the Years 2014 through 2017 and January through November 2018

		2014	2015 2016		2017	Nov 2018	TOTALS	
Ī	Capital	\$ 148,214,832	\$ 161,746,820	\$ 170,793,965	\$ 186,687,625	\$ 235,860,284	\$ 903,303,526	
Ì	O&M	\$ 49,412,258	\$ 48,970,799	\$ 63,396,312	\$ 61,396,507	\$ 61,749,219	\$ 284,925,095	

Source: Data Requests TD-11, TD-14, TD-84 and TD-85 and Auditor Analysis

Findings and Conclusions

Our examination of the Electric Operations function included a review of emergency operating guidelines, vegetation management, system reliability, maintenance policies and procedures, safety programs, staffing levels, system planning, etc. Based on our review, the company should initiate or devote additional efforts to improving the efficiency and the effectiveness of its electric operations by addressing the following:

1. Field operation departments incurred high levels of overtime.

DLC's craft workers are organized into four functional groups: overhead (OH), underground (UG), substation (SS) and operations center (OC) (i.e., troubleshooters and traveling operators work out of the OC). Exhibit VII-4 displays the number of craft workers as full-time equivalents (FTEs), overtime (OT) as a percentage of straight time, and the percentage change over the 2013 through November 2018 period for each group, and the shift schedules used by each group. Meter technician jobs were transferred from the OH group to the Customer Service business unit during the years 2013 through 2016, making it difficult to compare the change in the headcount of staffing levels from 2013 through November 2018. The auditors used total straight time hours to estimate the FTEs over this period. Our analysis by group revealed that, in general, Operations Center workers experienced the highest average overtime levels of 31.8% to 46.2%. However, the levels of annual overtime vary between 20.0% and 39.6% of regular or straight time hours during the period 2013 through November 2018. The auditors have seen historical overtime levels for craft workers at other EDCs that ranged from 15% to 20% of straight time. Overtime levels that exceed this range often indicate a need to increase staffing and/or adjust the existing staffing levels to other shifts to accomplish the work activities while reducing overtime levels.

To forecast its workload and staffing needs, DLC uses historical hours incurred in the past for each activity and yearly work plan projects to budget hours for forecasted work. The next step is to compare the hours forecasted for the year to the hours available from field resources. If the forecasted hours exceed those available from field resources, DLC develops overtime and contractor models to determine whether the use of contractor or internal resources (overtime) are appropriate. The models used are based on the type of work, the type of craft resources required to perform the work, the in-service date required, and the location. When the contractors are needed, the

resulting contractor and overtime conclusions are reviewed to ensure agreement between the terms of the Collective Bargaining Agreement (CBA) regarding use of union workers.

Exhibit VII – 4
Duquesne Light Company
Craft Worker Staffing and Overtime Levels
For the Years 2013, 2014, 2015, 2016, 2017 and as of November 2018

		2013	2014	2015	2016	2017	November 2018	% Change (<u>+</u>)
d	No. of FTEs	58	57	57	58	58	62	
Ę	Straight hrs	122,684	118,920	120,522	120,832	120,845	118,880	5.7%
gro	Overtime hrs	33,427	28,141	24,786	24,627	34,789	39,423	28.6%
erć	Overtime %	27.2%	23.6%	20.5%	20.3%	28.7%	33.1%	21.7%
Underground	Backshift(s) -		ursday from 7: day from 9:00					
σ	No. of FTEs	274	271	266	223	211	211	
Overhead	Straight hrs	570,259	564,552	554,664	465,118	438,899	402,516	NA
er.	Overtime hrs	176,102	105,796	94,273	76,399	145,440	183,231	NA
Š	Overtime %	30.8%	18.7%	17.0%	16.4%	33.1%	45.5%	47.4%
	Backshift -	Monday - Fri	day from 4:00	pm - 2:00am	1			
드	No. of FTEs	71	69	72	69	75	74	
atic	Straight hrs	148,476	143,571	150,106	145,281	156,447	142,392	4.6%
sta	Overtime hrs	45,647	42,269	28,670	32,135	37,830	39,904	-4.6%
Substation	Overtime %	30.7%	29.4%	19.1%	22.1%	24.1%	28.0%	-8.8%
S	Backshift -	Saturday from	m 7:00am - 3:3	30pm				
"	No. of FTEs	57	53	50	51	41	58	
i s	Straight hrs	119,455	111,834	104,752	107,061	85,527	112,243	2.5%
atio	Overtime hrs	38,002	35,837	38,792	43,549	39,562	45,279	29.9%
Operations Center	Overtime %	31.8%	32.0%	37.0%	40.6%	46.2%	40.3%	26.8%
do	Backshift(s) -		nday from 3:0 nday from 11:					
	No. of FTEs	460	450	445	401	385	405	
Total	Straight hrs	960,874	938,877	930,044	838,292	801,718	776,031	NA
ĭ	Overtime hrs	293,178	212,043	186,521	176,710	257,621	307,837	NA
	Overtime %	30.5%	22.5%	20.0%	21.0%	32.1%	39.6%	30.0%

Source: Data Request TD-32, TD-67, and TD-81

On April 15, 2016 the company submitted their Long-Term Infrastructure Improvement Plan (LTIIP) along with a Distribution Service Improvement Charge (DSIC) filing. PUC approval of the LTIIP and DSIC allows DLC to inject more capital into its distribution and transmission lines for rehabilitation and modernization over a six-year period. DLC set three goals in developing an LTIIP: cost-effectiveness, flexibility and execution. DLC highlights six areas of accelerated replacement: 4kV assets; aerial cable and overhead property; underground property; substation breaker and switch replacements; highway relocation projects; and a microgrid program. Additional information can be found at Docket No. P-2016-2540046 on specific assets being targeted.

A summary of the historical and projected spend for baseline and LTIIP projects is provided in Exhibit VII-5. Over the six-year period, DLC expects to spend roughly \$160 million or an additional \$27 million annually than it has spent in the prior six-year period.

Exhibit VII – 5
Duquesne Light Company
Historical and Projected Spend for LTIIP Projects
For the Years 2011 through 2022

			_•	ougn 202			
	2011	2012	2013	2014	2015	2016	Totals
Historical Spend (\$Mil	lion)						
4kV	12.8	4.8	3.3	1.6	1.0	4.2	27.7
Overhead	52.4	42.4	54.6	37.9	46.6	42.8	276.7
Underground	26.8	13.4	28.9	19.4	16.5	27.1	132.1
Substations	14.3	9.9	12.4	10.4	4.1	9.6	60.7
Highway Relocation	1.3	1.8	1.8	2.2	0.9	2.8	10.8
Microgrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	107.6	72.3	101.0	71.5	69.1	86.5	508.0
	2017	2018	2019	2020	2021	2022	Totals
Projected Baseline (\$N	Million)						
4kV	8.1	8.9	5.3	5.1	4.2	11.8	43.4
Overhead	40.0	59.9	47.5	41.6	43.5	44.9	277.4
Underground	21.0	24.7	25.3	20.2	20.6	20.2	132
Substations	8.3	11.2	9.7	8.5	7.1	6.2	51.0
Highway Relocation	2.8	2.8	2.9	2.8	2.9	3.0	17.2
Microgrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	80.2	107.5	90.7	78.2	78.3	86.1	521.0
Projected LTIIP (\$Milli	on)						
4kV	11.2	36.1	58.9	3.9	0.0	0.0	110.1
Overhead	0.0	0.5	1.6	0.0	0.0	0.0	2.1
Underground	0.8	3.5	3.0	1.9	2.4	2.0	13.6
Substations	0.0	1.6	2.2	0.4	0.0	0.0	4.2
Highway Relocation	2.8	2.8	2.9	2.8	2.9	3.0	17.2
Microgrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	14.8	44.5	68.6	9.0	5.3	5.0	147.2
Baseline + LTIIP	95.0	152.0	159.3	87.2	83.6	91.1	668.2

Source: Docket No. P-2016-2540046 and Auditor Analysis

With the inclusion of LTIIP projects, the company needs to hire craftworkers or increase the use of contractors. Otherwise, high levels of overtime for DLC field operations overtime will continue and not be cost-effective as the company indicated as an LTIIP goal. The company could realize cost savings by hiring more craft workers to reduce overtime levels with the increase in workload. In accordance with its CBA, craft workers are paid time and a half for overtime work. The audit staff conducted an analysis to determine the potential cost savings from increasing field operations staff levels so as to not incur more than 20% overtime on average during the period 2013 through November 2018. Based on factors such as the average hourly labor rate for craft workers, overtime rate, overhead rate, and hiring additional craft workers to reduce overtime hours, the audit staff estimates that DLC could have saved, on average, a net annual savings of about \$181,000 annually. Due to time constraints and data

availability, the audit staff was unable to include the use of contractors as a factor in the analysis.

2. Certain field operations employees worked excessive amounts of overtime during the years 2013 through 2017, and January through November 2018.

Due to the hazardous nature of working with high voltage lines, excessive overtime for individual craft workers can increase risk. Fatigue and reduced awareness can result in injuries to employees and/or customers and bring unnecessary damage to company and customer property. Accordingly, the auditors reviewed the amount of overtime individual craft workers from the four groups, as previously discussed in Finding No. 1, incurred annually for the same period. Individual employee overtime levels for these groups were provided by the company, and the ten employees with the highest overtime levels are shown in Exhibit VII-6. Many of the field operations employees have exceeded 1,040 hours (or about 50% of straight time) of overtime for any given year and have even reached as high 2,231 overtime hours (more than a traditional work year of 2,080 hours). It should be noted that the overtime hours reported in Exhibit VII-7 likely include hours not worked, but earned by craftworkers under certain circumstances that may be triggered by Call Out Rest Period Rules and minimum hours for callouts craftworkers are entitled to under the CBA.

Exhibit VII – 6
Duquesne Light Company
10 Field Operations Employees with Highest Overtimes Levels
2013 through November 2018

Rank	2013	2014	2015	2016	2017	Nov 2018
1	1,329	1,460	1,429	1,507	2,081	2,231
2	1,190	1,283	1,332	1,452	1,700	1,968
3	1,153	1,117	1,307	1,416	1,637	1,950
4	1,145	1,065	1,275	1,382	1,543	1,837
5	1,136	1,048	1,235	1,295	1,527	1,781
6	1,076	1,011	1,220	1,291	1,413	1,673
7	1,065	1,002	1,208	1,290	1,300	1,654
8	1,052	1,001	1,204	1,161	1,265	1,643
9	1,046	939	1,152	1,160	1,192	1,604
10	992	895	955	1,122	1,155	1,511

Source: Data Request TD-29, TD-82 and Auditor Analysis

Upon review of overtime data, individuals will incur most of the overtime hours in the categories of emergency, emergent and planned (normally over 95% of total overtime hours). "Emergency" overtime hours are subject to the callout program and are considered uncontrollable by the company. However, "Planned" and, in some

cases, "Emergent" "overtime within the same job classification shall be distributed as evenly as possible," per the CBA. For the years 2013 through 2017, "Planned" overtime hours accounted for 37.9% to 50.8% and "Emergent" amounted to 15.1% up to 29.9% of total overtime hours; these hours are provided in Exhibit VII-7.

Exhibit VII – 7 Duquesne Light Company Overtime Data by Category For the Years 2013 through 2017

	2013		2014		2015		2016		2017	
	Hours	% Total								
Total OT	11,182		10,821		12,316		13,075		14,812	
Emergency	4,388	39.2%	2,801	25.9%	4,095	33.2%	4,229	32.3%	5,042	34.0%
Emergent	1,694	15.1%	2,396	22.1%	3,677	29.9%	3,895	29.8%	4,068	27.5%
Planned	4,443	39.7%	5,498	50.8%	4,543	36.9%	4,951	37.9%	5,626	38.0%
	10,525	94.1%	10,695	98.8%	12,315	100.0%	13,075	100.0%	14,736	99.5%

Source: Data Request TD-29 and Auditor Analysis

Consequently, Duquesne Light will need to examine why field operation employees are incurring large amounts of overtime. By properly staffing field operation departments (see Finding and Conclusion No. 1), the company will have the additional resources available. However, even with additional resources, DLC will need to first understand why overtime hours are not being evenly distributed between the same classifications. Actively tracking overtime hours on a daily, weekly, biweekly, monthly and rolling 12-month basis through overtime exception reports will provide supervisors with insight on employees whom are working excessive schedules (i.e., 16 or more hours in a day, 100 or more hours in a month). The overtime exception reports will assist supervisors in properly assigning overtime hours and identifying specifically controllable overtime to ultimately ensure the safety of employees and customers.

3. Duquesne Light's Annual and Quarterly Update Electric Reliability Reports do not provide sufficient detailed outage data to help identify possible remedial actions for all outages.

Per Pa. Code § 57.195, an electric company must provide the Commission with quarterly updates and annual reports on the status of their system reliability. More specifically, sections (b)(4) and (e)(5) state that an EDC must provide "for the year reported on" or "a rolling 12-month breakdown and analysis of outage causes during the preceding quarter, including the number and percentage of service outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact, tree related, and so forth. Proposed solutions to identified service problems shall be reported."

DLC is currently reporting outage information with the following causes: storms, trees (contact), trees (falling), equipment failures, overloads, vehicles, and other. For each cause, the number of outages, outage percentage, kVA Total, kVA percentage, kVA-minute Total, and kVA-minute percentage provide insight on the frequency and extent of outages DLC experiences for the reported period. Exhibit VII-9 shows DLC's rolling 12-month outage data by cause for the third quarter of 2018.

Exhibit VII – 8
Duquesne Light Company
Third Quarter 2018 Reliability Report – Outage Causes

	No. of Outages	% of Total Outages	kVA Total	% of kVA Totals	kVA-minute Total	% of kVA-minute Totals
Storms	488	14.1%	866,281	14.5%	145,243,379	21.0%
Trees (Contact)	20	0.6%	23,527	0.4%	921,342	0.1%
Trees (Falling)	1,026	29.7%	1,686,928	28.3%	229,617,374	33.2%
Equipment Failures	848	24.6%	1,600,407	26.9%	173,453,157	25.1%
Overloads	165	4.8%	161,577	2.7%	12,096,163	1.8%
Vehicles	144	4.2%	415,719	7.0%	49,191,408	7.1%
Other	761	22.0%	1,201,656	20.2%	80,287,634	11.6%
TOTALS	3,452	100.0%	5,956,095	100.0%	690,810,457	100.0%

Source: Third Quarter 2018 Electric Reliability Report at Docket No. M-2016-2522508

Although this reporting format as shown in Exhibit VII-8 complies with the requirements set forth in Pa. Code § 57.195, it would be beneficial for DLC to expand certain categories further for better analysis. Tree-related outages are being labeled as "Contact" or "Falling." These descriptors do not address whether the outage is due to trees on or off the right-of-way (ROW), and account for a third of total outages. Additionally, the "Other" category includes multiple outage types such as, but not limited to, fire, flooding, line work, and tap changes. "Other" consistently accounts for over 18% of total outage causes, and upwards of 14% of total kVA-minutes.

The method of reporting tree-related outages does not provide the ability to assess the adequacy of the company's vegetation management practices; specifically, the effectiveness of the company's ROW practices. Simply classifying significant amounts of outages as "Other" does not provide an understanding if an outage was an act manageable by DLC. Including additional descriptors will provide insight on whether DLC is taking all possible remedial actions for outages within the control of the company.

4. The transmission and distribution maintenance tracking databases lack a summary of annual inspection and maintenance activity to analyze the status and performance of repairs completed and backlog by repair priority.

The company classifies and prioritizes transmission and distribution (T&D) maintenance issues found during inspections based on severity. Along with tracking the

severity of the deficiency, the database records location and circuit, assigned work order number and crew leader, condition and problem, repair date, etc. For transmission line deficiencies, there are two priorities, and distribution line deficiencies have three priorities:

- Transmission
 - Emergent inspection creates a work order used to track accelerated repair from open to completion; no set timeframe.
 - Normal Maintenance non-priority repair tracked through a blanket work order tied to transmission O&M.
- Distribution
 - Immediate Repair repair work order created and to be completed within 30 days.
 - Intermediate Repair repair tracked and scheduled for maintenance in the database.
 - Normal maintenance non-priority repair tracked through blanket work order tied to distribution O&M.

It is common practice for a utility, gas or electric, to provide a summary in their management dashboards of I&M activities for the calendar year. These activities include the number of repairs found during inspection, repairs completed, backlog, overdue and re-inspected all by repair severity. The summary of T&D I&M activities will enable DLC to trend performance of its capital and O&M programs.

Recommendations

- 1. Establish overtime level goals for each functional group with a goal not to exceed 20% and develop craftworker staffing levels and contractor resources to address the future workload, including work related to the Long-Term Infrastructure Improvement Plan.
- 2. Monitor and control individual employee overtime levels by using overtime exception reports to actively review employees incurring excessive amounts of overtime.
- 3. Include additional descriptors to outage causes and report tree-related causes as being either Vegetation Inside ROW or Vegetation Outside ROW for a more effective analysis of possible remedial actions to outage causes in future Annual and Quarterly Electric Reliability Reports to the PUC.
- 4. Create a summary report of annual transmission and distribution line repairs to trend inspection and maintenance activities.

VIII. CUSTOMER SERVICE

Background

Duquesne Light Company's (DLC) Customer Service business unit is directed by the Vice President, Customer Service and is comprised of six divisions: Billing/Revenue Management, Business Development, Customer Experience, Customer Service Transformation, the Contact Center, and Meter Operations. Exhibit VIII-1 shows DLC's Customer Service business unit organizational structure.

Exhibit VIII - 1

Duquesne Light Company
Customer Service Organizational Structure
As of December 2018

Vice President
Customer Service

Director
Billing/Revenue Management

Director
Customer Service

Director
Customer Service

Transformation

Director

Meter Operations

Source: Data Request CS-48

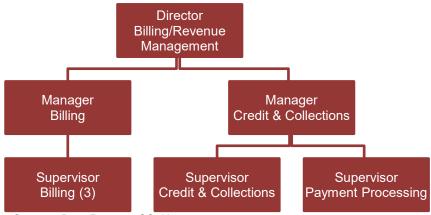
Customer Experience

Director

Contact Center

Exhibit VIII-2 shows the Billing/Revenue Management organizational structure. The Director, Billing/Revenue Management, whose direct reports include the Manager, Billing and the Manager, Credit & Collections, oversees 31 employees responsible for the meter to cash processes at DLC. Meter readings are collected in the Meter Data Management (MDM) system and are automatically uploaded into the Customer Care & Billing (CC&B) system to generate customer billings. DLC utilizes 21 billing cycles to prepare monthly billings for its approximately 595,000 customers. Assuming no exceptions noted by either system, customer billings are prepared and mailed or sent electronically the day after meter readings are obtained. When no exceptions are noted, this process is 100% automated.

Exhibit VIII – 2 Duquesne Light Company Billing/Revenue Management Organizational Structure As of December 2018



Source: Data Request CS-48

Customer billings are due 21 days from the date the billing is prepared. Most customer billings are paid by check which are processed via an automated check processing system at DLC's downtown Pittsburgh office. Any electronic payments received are combined with the processed check payments and are credited to DLC accounts daily.

Customer accounts that have unpaid balances on the 28th day after the billing date are considered delinquent. DLC uses a bifurcated methodology of both telephonic and written correspondences to encourage customers to bring delinquent accounts current before resorting to termination of service. If service is terminated, the customer is issued a final billing which is due 21 days after the final billing date. If no payment is received by the 28th day after the final billing date, the outstanding balance is placed with one of multiple contracted third-party collection agencies.

The Business Development division, consisting of a director and 14 supporting employees, is responsible for the initiatives and innovations to assist DLC with its goal of offering products and services to become a trusted energy partner. This group researches electric-industry and public utility emerging technologies to best meet the needs of its ever-changing customer demographics. An example of the initiatives developed through this division is the transportation electrification project.

The Customer Experience and Customer Service Transformation divisions within DLC's Customer Service business unit each play critical roles to strengthen DLC's service-minded culture. Their responsibilities include planning and overseeing customer and universal service programs, evaluating customer service analytical data to identify customer service performance strengths and weaknesses, planning and implementing customer care training, overseeing customer care system improvement projects, etc.

DLC offers assistance to its low-income customer base through its Universal Service and Energy Conservation Plan. The plan has four components:

- the Customer Assistance Program (CAP) which offers the opportunity for arrearage forgiveness and reduced payment arrangements;
- Customer Assistance Referral and Evaluation Services (CARES) which provides information regarding resources available through company and community assistance programs;
- the Hardship Fund which provides financial assistance for overdue energy bills; and
- Smart Comfort which is DLC's Low-Income Usage Reduction Program (LIURP) which offers opportunities for weatherization and other usage reduction measures.

The Contact Center, located at DLC's downtown Pittsburgh office, handles the inbound telephonic, electronic, and written inquiries of customers. Exhibit VIII-3 shows the Contact Center organizational structure. Including the managerial levels shown in Exhibit VIII-3, there is a total of 105 Contact Center employees. DLC also retains 22 contracted third-party employees at an off-site call center to assist with overflow inbound calls. DLC maintains a redundant call center facility at one of its service center locations to be able to continue providing optimal customer service should there be a crisis event preventing the use of the main Contact Center facility.

Exhibit VIII - 3

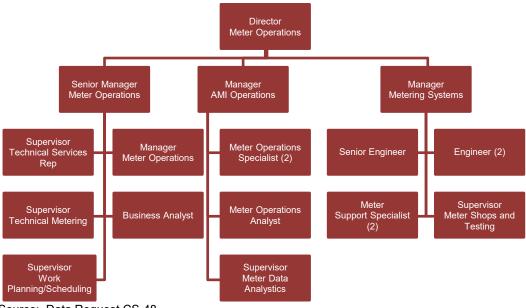
Duquesne Light Company Contact Center Organizational Structure As of December 2018 Director **Contact Center** Administrative Coordinator Manager General Manager Manager **Contact Center Contact Center Contact Center** Quality Assurance Supervisor Contact Center (5) Source: Data Request CS-48

The General Manager, Contact Center and reporting five supervisors manage the customer service representatives (CSRs) scheduled for Monday through Friday business hours. This group handles the bulk of the inbound customer calls. The Manager, Contact Center manages the shift CSRs who answer emergency calls after hours as well as respond to electronic and written customer inquiries. The Manager, Contact Center Quality Assurance (QA) oversees DLC's newly added QA group.

The QA group was added in July 2018 to assist the Contact Center in meeting DLC's business strategies as well as its compliance and regulatory requirements. The QA group performs evaluations based on making observations of a sample of all the different types of interactions that the CSRs have with customers to offer feedback to supervisors for coaching, to provide analytical data for performance trending, and to assist in identifying training needs. In addition, QA has implemented multiple team building and performance recognition programs to motivate continuous performance improvement and to enhance division morale.

Between 2013 and 2018, the Meter Operations division has been in transition preparing for and implementing the conversion to a fully automated smart metering system by the end of 2018. DLC has implemented Itron's OpenWay Advanced Metering Infrastructure (AMI) system which enables two-way communication between DLC's AMI communication network and customers' AMI meters. The Meter Operations division was reorganized to align new roles and responsibilities as a result of the new metering technology. As an example, the traditional role of the physical meter reader has been transformed to a meter technician whose responsibilities include trouble-shooting meter reading errors, monitor metering functionality, and test and service meters. Exhibit VIII-4 shows the Meter Operations organizational structure. In addition to the positions presented below, there are an additional 100 employees supporting the Meters Operations division.

Exhibit VIII – 4 Duquesne Light Company Meter Operations Organizational Structure As of December 2018



Source: Data Request CS-48

Findings and Conclusions

Our examination of the Customer Service function included a review of assigned responsibilities, policies and procedures, performance measures and levels, customer care and metering system capabilities, training and employee development, universal service programs, and current initiatives. Based on our review, DLC should initiate or devote additional effort to improving the efficiency and/or effectiveness of the Customer Service function by addressing the following:

1. Customer care performance declined following the November 2014 installation of a new customer care system.

The review of customer service performance included the following metrics:

- Call Abandonment Rate
- Percent of Calls Answered Within 30 Seconds
- Number of Residential Disputes Not Receiving a Response Within 30 Days
- Response Time to the Pennsylvania Public Utility Commission (PUC) Bureau of Consumer Services (BCS) for Residential Consumer Complaints in Days
- Percentage of Residential Meters Not Read in Six Months
- Percentage of Residential Customers Not Billed Each Billing Cycle
- Satisfaction with Ease of Reaching the Electric Distribution Company (EDC)
- Satisfaction with Using the EDC's Automated Phone System

Overall Satisfaction with EDC's Quality of Service

The consistent trend within all the performance metrics listed above was that DLC was performing adequately prior to 2015, performance declined sharply between 2015 and 2016, and then performance slowly recovered to adequate or above adequate levels throughout 2017 and into 2018. The reason DLC provided for this decline in performance was difficulty recovering from problems arising from the installation of a new customer service system in November 2014.

There were numerous technical difficulties during the new system installation which caused excessive delays between the training provided to employees regarding the process changes associated with the new system and the implementation of the system. In addition, frequent situations occurred which required additional changes to the newly learned work processes to work around system malfunctions which resulted in confusion and inconsistency of application use.

DLC is preparing for a customer care system upgrade with an expected December 2019 implementation. The auditors reviewed DLC's preparation strategies for this update. DLC's Customer Service Transformation division is overseeing this project and provided an outline of the planned preparation activities. DLC has planned a testing phase for February 2019 through June 2019 with a tiered checkpoint structure intended to fully examine the integrity of all processes that will be affected by the update and an extensive training phase for July 2019 through December 2019 including both online and instructor-led training activities.

DLC has partnered with Oracle, the CC&B system developer; Accenture, the system testing facilitator; and EY Training, the company contracted to develop and implement the training phase, for expertise and guidance throughout the transition. This includes a three-month hyper-care phase that will remain intact subsequent to the update implementation date to provide on-site user support. Between DLC employees and hired contractors, there are approximately 85 individuals assigned to this project.

System upgrades are necessary to allow for continued improvement and development. Companies must properly prepare for major changes in policies, procedures, and system applications in order to have smooth transitions throughout the implementation of these types of changes.

Testing the new processes well-enough in advance of implementation helps ensure the desired outcomes. There should be enough time during this process to allow for multiple attempts at problem resolution should the need arise. Once the testing phase has been successfully exhausted, the company must provide the necessary training prior to implementing the change. The training phase, as with the testing phase, must be done well-enough in advance of the anticipated implementation date to allow for proper absorption of the new information and work processes as well as to allow for reasonable remediation training if needed. Training, however, should not be done too far in advance of the implementation so users do not forget what they have learned. Whereas poor planning and preparation for the November 2014 system

installation resulted in service performance decline, DLC, by implementing the outlined preparation strategy, could prevent a repeat of those negative consequences.

2. The Credit and Collections division does not maintain goals to manage its third-party collection activities.

DLC had contracts with four third-party collection agencies as of December 2018. The auditors reviewed the current third-party collections agency contracts and noted that most of the contracts were last negotiated in 2011 or 2012. Although net recovery performance was average during the audit period, DLC does not maintain net recovery performance goals to ensure recovery is maximized.

It is a best business practice for companies to maintain third-party collection agency performance goals to be able to evaluate third-party collection results. These goals should focus on net collection results to evaluate actual recoveries less any commissions due to the third-party collection agency. Having performance goals versus actual results analysis available will allow for proper management of the relationships between DLC and its third-party collection agencies.

Without a reasonable goal for collection agency performance, DLC is unable to determine when a certain collection agency's practices are not achieving the desired level of performance. This makes it difficult to know when or what type of remedial actions are needed to improve performance. In addition, having regular procedures to monitor third-party collection agency performance would allow for more timely and ongoing negotiations between DLC and its third-party collection agencies to ensure that pricing terms and performance parameters are managed on a real-time basis.

Recommendations

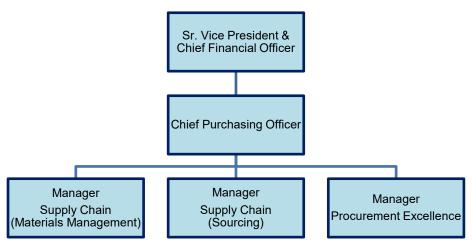
- 1. Implement the extensive testing phase and training phase currently planned to prepare for the December 2019 customer care system update.
- 2. Establish, implement, and monitor key performance indicators of third-party collection agency net recovery performance goals.

IX. PURCHASING AND MATERIALS MANAGEMENT

Background

Duquesne Light Company (DLC or company) has a Chief Procurement Officer (CPO) who is responsible for purchasing and materials management functions. Three groups perform these functions under the direction of the CPO; Materials Management, Procurement Excellence, and Sourcing. Exhibit IX-1 displays DLC's procurement organization structure.

Exhibit IX – 1
Duquesne Light Company
Procurement Organization
As of December 2018



Sources: Data Requests EM-2 and MM-1

Each group's responsibilities are:

- Materials Management Manages inventory and produces and prepares needed items in its shop for transmission and distribution purposes.
- Sourcing Negotiates and procures materials and/or services requested by the business for power transmission and distribution to DLC's customers.
- Procurement Excellence Maximizes efficiencies and develops the expertise
 of Sourcing and Materials Management groups. This group was created in
 2017 with the intent of bringing new initiatives (with the addition of new
 technologies described later).

DLC employs the use of a hub warehouse which, in addition to being used as a traditional warehouse delivery location from suppliers and storage of materials, this location also features metal workers and machinists who custom produce materials for use by the company. Materials are shipped from the hub warehouse to storerooms

throughout the distribution territory. DLC's storerooms are in Manchester, Edison, McKeesport, Penn Hills, Preble, and Raccoon. Field employees on the service side of the business rarely acquire their materials directly from the hub warehouse; however, in some unique situations for larger construction projects, this may be done. The company determined that the addition of a second hub warehouse would add to geographical efficiency for the northern part of the territory and is currently in the process of adding this second hub warehouse which should be in full operation by January 2019.

DLC is adding bar coding to its inventory process. In November 2018, the manual process was still in place and pilot bar coding procedures at the hub warehouse were being added simultaneously so the employees can learn the proper bar-coding methodology. Full bar-coding usage is expected to be in place by September 2019.

Oracle Utilities Work and Asset Management (WAM) is used by DLC as the system for purchase requisitions, purchase orders, blanket contracts, inventory transactions, receiving, stock codes, vendors, and invoice approvals. Sample management reports used to track company performance include reclaimed issues, inventory level tracking, inventory Pareto analysis (cycle counts by a percentage of inventory value), total turns, turns by service center, inventory values by material description, and monthly inventory comparisons. The company also tracks warehouse accidents and cost savings from various strategies (e.g., via negotiations, changes in procurement strategy, etc.).

Findings and Conclusions

Our examination of the materials management function included a review of assigned responsibilities, policies and procedures, information systems, reporting capabilities, inventory controls, inventory levels, turnover rates, and warehouse operations. Based on our review, DLC should initiate or devote additional effort to improving the efficiency and/or effectiveness of the purchasing and materials management function by addressing the following:

1. Duquesne Light Company is using an outdated inventory management system with limited functions and reporting capabilities.

The auditors' initial examination of the purchasing and materials management function would typically include inventory turnover and inventory optimization analyses; however, the auditors could not perform these because WAM has the following limitations:

 Inventory stock balances and issues were available; however, emergency stock inventory could not be segregated and removed from the inventory totals. DLC calculates and tracks the turnover for its total inventory balance, but this is not a meaningful measurement for the company's active inventory because emergency stock is included in the turnover calculation, distorting the result.

 The system is not capable of calculating economic order points (EOP) and economic order quantities (EOQ). Employees use historical estimates to determine when to re-order and the quantities of stock items when inventory levels are low. Inventory optimization cannot be realized without properly calculated and utilized EOPs and EOQs.

The ability to segregate emergency stock items from active inventory balances and maintain usage data to calculate optimum EOPs and EOQs are standard capabilities of an efficient and effective inventory management system. Additionally, as of July 2018, the software vendor no longer supported WAM. DLC plans to replace WAM with IBM Maximo (Maximo) in September 2019. A sample of other Maximo's enhanced, or brand-new capabilities are as follows:

- The ability to track material usage, turn ratio and inventory by item with specific history and details for items such as dates received, stocked, picked, staged, issued, etc. WAM currently only provides received and issued dates. Additionally, Maximo provides the ability to track supplier and internal delivery performance based on promised date versus received date.
- The ability to reserve inventory by both hard and soft reservations. This is not currently available with WAM.
- Work forecast capabilities will provide a better understanding of what materials will be needed which is not currently available in WAM.
- The ability to track as built changes. This will ensure that changes are documented and approved. This is currently unavailable in WAM.
- The creation of electronic purchase orders and contracts to suppliers. This is unavailable in WAM.
- Bar coding (in the early stages of implementation during field work as previously mentioned) which will provide exact amount of material on hand.

The company should establish optimization goals once Maximo has been implemented and the system has established proper EOP and EOQ levels. It is difficult to estimate the related cost savings associated with the implementation and proper use of Maximo; however, the company estimates that by the end of 2019 an inventory reduction of \$1.5 million can be realized. At a carrying cost of approximately 7%, this equates to approximately \$105,000 annually.

Recommendation

1. Implement Maximo for enhanced inventory tracking and reporting, and establish inventory turnover goals based on optimal usage patterns.

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 comprised of the following questions and is available on the PUC website and is displayed 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.

The auditors reviewed selected aspects of security related measures at the company as part of this review. Specific information will not be revealed in this report but rather the generalities of the information are summarized due to the sensitive nature of the information reviewed.

The auditors reviewed the most recent (i.e., 2017) Self-Certification Forms submitted by Duquesne Light Company (DLC) during fieldwork to determine the status of its responses. The auditors' examination of DLC's 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 emergency preparedness plans and related manuals were deemed complete and appropriate. The auditors also performed inspections at a sample of DLC's facilities including the headquarters and some remote field locations.

Additionally, the auditors reviewed policies, procedures and general practices related to security (e.g., background checks, drug testing, contractor access to physical and cyber systems) and found these areas to be sufficient.

DLC has employed the following measures to address its physical and cybersecurity needs:

- Various security measures which restrict physical access to buildings, service centers, garages, and maintenance areas.
- Limited access to information and operational technology networks, internet, intranet and software applications. An employee's job description and title determine the access levels granted.
- Multiple types of clustered industry standard firewalls to secure and protect its critical cyber infrastructure.
- Periodic exercises for cyber risk and vulnerability assessments which include aspects of social engineering and are often conducted in coordination with federal, state, and local law enforcement and government agencies.

DLC tests its Physical Security, Cyber Security, Emergency Operations and Business Continuity Plans at least annually, and in some instances, multiple times per year. This includes, but is not limited to, cyber social engineering tests (e.g., online testing which involves revealing passwords or clicking on links, etc., and education and tabletop reviews of penetration testing such as having appropriate badges, identification, etc.). 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 as necessary. The plans are updated following the testing and review of each individual plan. The individuals and their department(s) assigned to each plan are as follows:

- Physical Security Plan Manager, Security
- Cyber Security Plan Chief Information Security Officer
- Emergency Response Plan Director, Operation Center
- Business Continuity Plan Director, Safety and Operations Services

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 DLC's emergency preparedness efforts, no evidence was discovered that would lead the auditors to conclude that the areas reviewed were inadequately addressed.

Recommendations

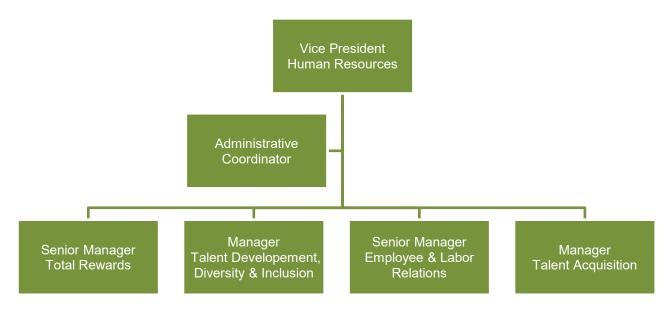
None

XI. HUMAN RESOURCES

Background

Duquesne Light Company's (DLC) Human Resources (HR) business unit is directed by the Vice President, Human Resources which is comprised of four divisions: Total Rewards; Talent Development, Diversity & Inclusion; Employee & Labor Relations; and Talent Acquisition. Exhibit XI-1 shows DLC's HR organizational structure. Each division presented below has multiple tiers of specialists, associates, and coordinators for a total of 20 HR employees.

Exhibit XI – 1
Duquesne Light Company
Human Resources Organizational Structure
As of December 2018



Sources: Data Requests EM-2 and EM-85

The four divisions within the HR business unit work together to manage DLC's HR strategy. The Total Rewards division manages compensation, benefits, and the Human Resource Information System (HRIS) functionality. The Talent Development, Diversity & Inclusion division manages the training and development needs as well as the company's prioritization of workforce replenishment through recruiting, retaining, and developing the diverse workforce. The Employee & Labor Relations division provides communication and cooperation between the labor union⁶ and the company. And lastly, the Talent Acquisition division manages the overall recruitment, retention, and leadership development processes.

-

⁶ International Brotherhood of Electrical Workers Local 29

DLC's compensation strategy is bifurcated between pay-for-performance for non-union employees and compensation parameters as defined in the current bargaining agreement for its union-covered employees. HR refers to third-party market data sources at least every two years to ensure that its non-union employee compensation levels are aligned with current industry levels. It also provides both short-term and long-term incentive programs to reward non-union employees based on performance. Medical, dental, and vision coverage plans are included in the total compensation package for employees. In addition, DLC offers flexible medical and dependent care spending accounts, commuter benefits, and supplemental life insurance options.

Toward the end of 2016, DLC installed a new HRIS called Success Factor by SAP. DLC subsequently began rolling out different modules of the program to maximize efficiency while balancing the costs involved with rolling out the new modules over time. As of year-end 2018, DLC had implemented the core HRIS module along with the Performance and Goal Management module, the Recruiting module, and the Contingent Workforce module. DLC has plans to roll out the Learning Management module over the 2019-2020 period.

Separate systems have been implemented for payroll and benefits management; however, DLC's Information Technology business unit has created visual cohesion between the payroll system, All T Pro; the benefits system, Imperion; and the Success Factor SAP HRIS to give end-users the feel of using one integrated system. The HRIS handles the typical employee self-service functionalities such as maintaining personal contact information, processing benefit change requests annually or following major life events, submitting leave requests, applying for posted employment positions, etc. The system also has managerial functionality that allows supervisory staff to manage annual performance evaluations, request postings for vacant employment positions, coordinate work assignments, and to document employment status changes.

Since 2014, DLC has performed an annual succession planning review to identify top candidates for critical managerial roles at the manager level and above. This review also highlights those employees who have shown potential for future leadership roles so that steps can be taken to offer additional training and development opportunities to further enhance performance by offering new challenges as well as to motivate these individuals to continue to exceed goals.

In addition to prioritizing succession planning and leadership development, DLC has taken steps to improve diversity among its workforce. The Pennsylvania Public Utility Commission (Commission) has encouraged utilities to proactively improve diversity in their workforce and purchasing efforts for more than two decades. In February 1995, the Commission adopted Chapter 69 regulations, which encouraged utilities to include diversity efforts as a component of their business strategy. Since March 1997, the Commission has required utilities to file annual reports that identify their efforts in improving diversity in their workforce and purchasing efforts. DLC filed its most recent annual diversity report to the Commission in February 2018 and continues to be timely with annual diversity report filings. Included in the diversity report are

sections related to HR and Purchasing. Some trends in improving workforce diversity at DLC include the following:

- The female population of DLC's workforce has increased by 4.9% from 2011 through 2017.
- Women in leadership roles has increased by 67%⁷.
- In 2017, 33% of those promoted internally included women and minorities.
- DLC has implemented a veteran recruiting program and has had greater presence at military career fairs; DLC was selected for RecruitMilitary's⁸ Most Valuable Employers Award for employers whose recruiting, training, and retention plans best serve military service members and veterans.

DLC's Affirmative Action Program, which includes placement goals, is executed by HR under the direction of the Vice President, Human Resources. These activities are supported by the Manager, Talent Development, Diversity & Inclusion who is responsible for developing, implementing, and evaluating diversity programs to ensure compliance with government legislation and organizational goals. The Manager, Supply Chain (Sourcing) is responsible for the negotiation and procurement of materials and/or services. The Supply Chain business unit at DLC actively encourages its internal clients to include Minority, Women, and Disadvantaged Business Enterprise (MWDBE) suppliers in their purchasing requirements of goods and services. A Supplier Diversity Policy was implemented in early 2018 and is available to all DLC employees to further the use of MWDBE suppliers.

This chapter also includes an overview of the safety culture at DLC. Management of the safety programs is primarily the responsibility of the Safety, Health, and Environmental group (SHE), which resides in the company's Operations business unit. Exhibit XI-2 shows the SHE organizational structure. Since 2014, DLC has been actively enhancing its overall safety culture by extending the responsibility so that every employee has ownership in his/her active role in overall safety. There are key safety personnel who help direct and manage the safety programs, but the responsibility for safety is company-wide. In addition to SHE, there are many DLC employees who serve on safety committees or teams throughout the organization. In total, there are about 150 employees engaged in one or more safety committees/teams. Some of DLC's safety committees/teams include:

- Safety Core Team
- Injury Avoidance
- Driving Excellence
- Work Practices and Equipment
- Site Safety Steering Committees⁹

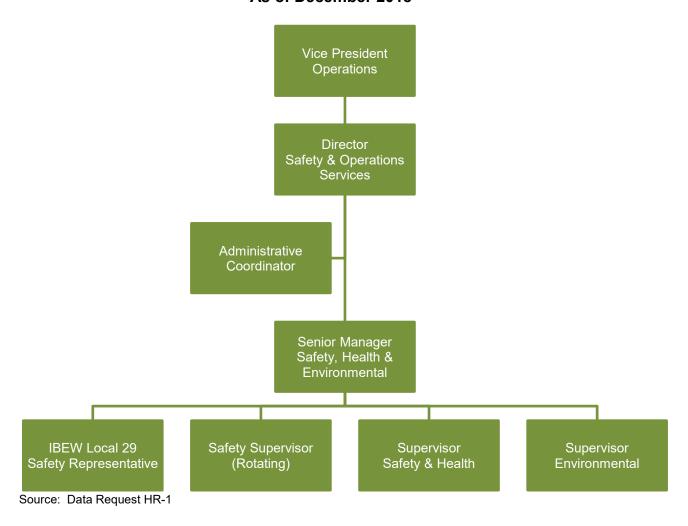
⁷ 42 females in leadership in 2015 vs. 70 in 2018

_

⁸ RecruitMilitary is the largest military-focused recruiting company in the US which offers employers access to more than 1.2 million military job seekers.

⁹ There are approximately ten active site safety teams representing various locations around the company which focus on specific safety issues and initiatives for their group.

Exhibit XI – 2
Duquesne Light Company
Safety, Health, and Environmental Organizational Structure
As of December 2018



There have been a multitude of safety programs and initiatives established over the 2015-2017 period to support DLC's goal of improved overall safety through the enhancement of the safety culture. Some of these include:

- a comprehensive review of the Safety Handbook resulting in over 100 significant improvements;
- intensified requirements for protective clothing/footwear;
- greatly enhanced field presence of SHE to coach field crews on opportunities for improvement in safety and environmental practices;
- the implementation of activity-based safety goals for supervisors within the performance management system;
- a Safety Performance Improvement Program to provide opportunities for remediation to at-risk employees;

- an improved in-vehicle monitoring system through DLC's fleet vehicles to provide alerts to drivers during vehicle operation as well as to provide comprehensive data used for analytics, feedback with which to coach vehicle operators, incident investigation, and vehicle diagnostics;
- a safety leadership workshop provided through Utility Business Media, a company specializing in electric utility safety training; and
- the continuation of the Annual Refresher Training conducted by SHE and Workforce Development tailored to the needs of specific divisions/groups.

Exhibit XI-3 shows the improvement trends in safety performance metrics realized through DLC's heightened safety culture. The first metric presented is the Total Recordable Incident Rate which represents the company's annual safety performance by calculating the number of Occupational Safety and Health Administration (OSHA) - recordable incidents per 100 employees. OSHA-recordable injuries are accidents that result in medical treatment beyond first aid, at least one day of either lost time, or restricted duty excluding the day of injury or a fatality. The second metric, Days Away/Restricted or Transfer (DART) Rate, represents the number of recordable incidents that resulted in days away from work, restricted work activity, and/or job transfer that the company has experienced per 100 employees over the calendar year. The third metric is the Preventable Motor Vehicle Accident (PMVA) Rate which shows how many preventable motor vehicle accidents the company has experienced annually per hundred thousand miles driven. Lower values indicate better performance for all three metrics. Note that the performance of all three metrics has improved during the period reviewed.

Exhibit XI – 3
Duquesne Light Company
Safety Performance Metrics
For the Years 2013 through 2017

Safety Metric	2013	2014	2015	2016	2017
Total Recordable Incident Rate	3.10	3.20	0.99	0.82	0.93
DART Rate	1.97	2.43	0.66	0.44	0.64
PMVA Rate	7.66	13.52	16.78	9.16	6.66

Source: Data Request HR-34

HR has been in transition since November 2013 when it initiated a plan to align the business unit's culture with DLC's business strategy. HR refers to the Bersin & Associates' HR Maturity Model to guide it through its developmental process. Exhibit XI-4 outlines this model.

Exhibit XI – 4 Duquesne Light Company Bersin & Associates' HR Maturity Model



The HR business unit performed a self-assessment in November 2013, considering input it received from the other business units within DLC, and found that it was starting from a point of being a Compliance-Driven HR Services Provider. At the end of 2017, the HR business unit assessed itself as having attained Level 3 maturity and intended to achieve Level 4 maturity by 2020. HR's key initiatives through 2021 include:

- aligning DLC's total reward compensation strategy with company performance:
- enhancing workforce planning, recruiting, and retention strategy;
- prioritizing employee and leadership development;
- renegotiating the labor contract; and
- implementing additional modules of the HRIS.

Findings and Conclusions

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

1. The language regarding workplace safety used within various policies and contracts to engage contractors for Duquesne Light Company projects is inconsistent.

DLC addresses contractor safety in multiple documents used throughout its engagements with contractors. One such policy, the Contractor Code of Conduct, is used to make contractors aware that, when working on DLC projects, there is an expectation for the contractors to uphold certain standards of conduct as outlined in the document. Within this document, the standard of contractor safety is stated as "Contractor will comply with the more stringent of Contractor's safety policies and procedures and those of Company." This language is vague and highly subjective. DLC also uses fourteen different versions of contractor agreements to hire contractors. There are safety-related sections within each document; however, the language is inconsistent from document to document. There is also language indicating that contractors are to comply with applicable regulations and laws as well as to DLC representative direction. This language, like that in the Contractor Code of Conduct, is vague and highly subjective in interpretation.

Requiring contractors to follow specific safety guidelines, as prepared by DLC, could potentially increase the legal liability of DLC should there be an accident where the contractor was following DLC safety guidelines with which the contractor may not be familiar, and/or if not properly trained to perform could, in turn, diminish the safety environment of contractors hired by DLC. This practice does not inherently support DLC's safety goals nor its underlying safety culture mission. Ensuring that all written documents used throughout the process of engaging with contractors are consistent in language and meaning is important to avoid confusion and potential legal liability. Enforcement of adherence to legally and ethically sound contractor engagement documentation will ensure positive, effective relationships between contractors and DLC.

United States employers, including DLC and any contractor DLC would hire, are required to comply with OSHA standards. Requiring all contractors that engage with DLC to comply with all OSHA standards is lawful, ethical, and finite in definition. Any performance standards DLC determines to be necessary to enforce with contractors should be defined, in writing, and agreed upon during the contractor onboarding process.

Recommendation

1. Revise written documents used to engage contractors to include consistent language requiring contractors to comply with all OSHA standards and to remove any language directing contractors to comply with undefined safety directives of representatives of DLC.

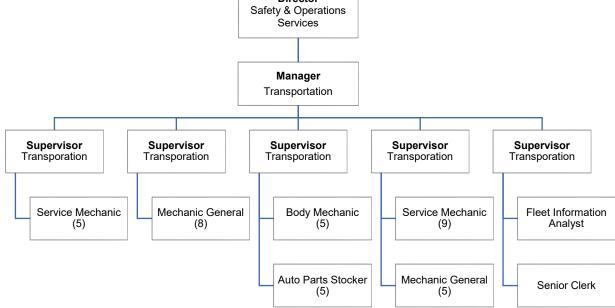
XII. FLEET MANAGEMENT

Background

The Transportation department (Transportation) of Duquesne Light Company (DLC or company) is responsible for purchasing and maintaining the transportation fleet. As part of its mission, Transportation provides department managers with vehicles to perform company work, procures additional vehicles or restores idle vehicles into the vehicle pool, conducts maintenance services to company owned vehicles and manages daily operations of fleet support facilities. Transportation works closely with user departments, particularly other Operations departments (see Chapter VII – Electric Operations), to develop vehicle specifications which most appropriately meet the user department's needs. The Transportation department is organized as shown in Exhibit XII-1.

Exhibit XII – 1
Duquesne Light Company
Transportation Department
As of June 13, 2018

Director
Safety & Operations
Services



Source: Data Request No. VE-01

The Manager of Transportation reports to the Director of Safety & Operations Services and is responsible for fleet operations, including budgeting and all administrative needs. Reporting to the Manager are Supervisors; four of which oversee service mechanics, body mechanics and auto parts stockers. The service mechanics perform inspections, repairs, and adjustments to all types of company equipment; not just limited to company vehicles. The construction, fabrication, welding, and painting of

automotive equipment and machinery is handled by the body mechanics. Auto parts stockers complete manual and clerical work associated with receiving, storing, and issuing material and supplies in the parts storeroom. An additional supervisor manages a Fleet Information Analyst and a clerk. These individuals control the disposition and use of the general vehicle pool; coordinate and maintain documentation of ownership, operation, licensing, and storage of the fleet; prepare and maintain computer records and databases; and coordinate activities of clerical and storeroom personnel.

Transportation operates five garages, which are located at each of the service centers mentioned in Chapter VII – Electric Operations. Much of the preventative maintenance and inspections are performed in the evenings when vehicles are back from field work. Any large corrective work is performed at the Woods Run facility due to its accommodations. However, any vehicles requiring repairs covered under warranty are picked up and delivered by the dealership. This increases productivity and allows technicians to stay in the garage rather than behind a wheel.

Transportation utilizes various management systems to track and maintain fleet information. To track real-time performance, DLC implemented the use of GeoTab's software in March 2017, and installed GPS control modules beginning May 2017. GeoTab can retrieve real-time data from fleet vehicles such as diagnostic information and any fault codes. The information is compiled and displayed into a user-friendly dashboard for review. The dashboard displays metrics about top idling by day and week, top vehicles with engine faults, voltage readings, vehicle speed trending, fuel usage, and a risk management report. Additionally, a vehicle maintenance management system, FASTER, monitors vehicle and equipment scheduled maintenance, as well as tracks parts and labor cost assigned to vehicles. FASTER schedules preventative maintenance activities to ensure routine services, inspections and part replacements guidelines are being followed.

The fleet consists of passenger cars, sport utility vehicles (SUV), cargo vans, pick-up trucks, specialized construction vehicles (e.g. splicer trucks, derrick diggers, aerial trucks, and cranes) and trailers used for transporting construction equipment. Exhibit XII-2 shows the total number of vehicles and equipment, by vehicle type, for DLC at year-end for 2016, 2017 and as of May 2018.

Exhibit XII – 2 Duquesne Light Company Transportation Department Vehicles and Equipment at Year End 2016, 2017 and as of May 2018

	2016	2017	2018
Compact	22	22	22
SUV	66	66	66
Pick-Up Compact	51	51	51
Pick-Up Standard	27	27	27
Pick-Up Heavy Duty	136	136	136
Van	46	46	46
Flat Trailer	11	11	11
Dump	6	6	6
Service	5	5	5
Maintenance	19	19	19
Splicer Truck	17	17	17
Bucket	3	3	3
Platform	2	2	2
Aerial	182	179	171
Digger	40	40	40
Crane	12	12	12
Semi	3	3	3
Other*	105	108	109
TOTAL	753	753	746

^{* -} Other includes a combination of forklifts, lawn equipment, backhoes, sweepers, etc. Source: Data Request VE-4 and VE-13

Findings and Conclusions

Our examination of the Fleet Management function focused primarily on a review of the vehicle and equipment acquisition process, including the use of lease versus buy analyses and competitive bidding, vehicle and equipment maintenance and repair, and the process for monitoring vehicle and equipment utilization. Based on our review, the company should initiate or devote additional efforts to improving the efficiency and effectiveness of its fleet management function by addressing the following:

1. Fleet management activity reports contain errors on asset utilization.

Fleet reports provided to the auditors contained erroneous information for vehicle usage and statistics. FASTER reports show certain vehicles with a negative mileage or no reading at all. The vehicles in question are currently in use and should have accurate mileage recordings to ensure proper usage of vehicles. Additionally, the GeoTab dashboard provides real-time information of fleet vehicles but included errors

about idling times. In one instance, idle time for a vehicle had reached 12 hours in a day; although, the employee operating the vehicle only worked a traditional eight-hour shift. GeoTab receives information from vehicle onboard devices from all different makes and models and processes data onto the dashboard. At some point, either during processing or transmitting, a data error is occurring. The erroneous data could be a result of how the various vehicles makes and models are processing and transmitting the data to the dashboard.

Although the use of fleet management software and hardware enables DLC to track and monitor company assets and labor, flaws in the design of the software or hardware are rendering reporting of fleet performance to be less useful. Accurate record keeping and data reporting are necessary to enhance asset operation and efficiency, while also providing data to determine fleet performance.

2. Duquesne Light Company does not have a formal procedure for the disposal, retirement, and transfer of fleet assets.

Duquesne Light Holdings Inc. (DLH), DLC's parent, maintains two primary fleet usage governing documents. These documents are referred to as the Transportation and Vehicle Use Policy (CP-018) and Transportation and Vehicle Use Procedure (CP-018A). The purpose of CP-018 is to document the requirements and expectations of employees who operate a vehicle while conducting company business and applies to DLH and each business subsidiary personnel; mainly focused on DLC and DQE Communications (DQE Comm). The purpose of CP-018A is to provide detailed guidance on adherence to the Company's Transportation and Vehicle Use Policy. Although the Transportation and Vehicle Use Procedure provides a statement on the disposal, retirement and transfer of vehicles for DQE Comm, it does not provide a similar statement for DLC.

By not properly establishing procedural criteria in order to identify vehicles for replacement or disposal, the company may not be operating in the most cost-effective manner as maintenance costs increase disproportionately as the fleet ages. Consequently, the company should formalize a disposal and vehicle asset retirement policy like that of DQE Comm; possibly using a combination of mileage and engine hours to determine eligible vehicles.

Recommendations

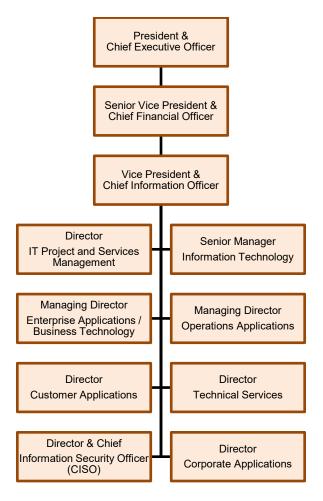
- 1. Create an action plan to identify and resolve root causes of erroneous data to ensure fleet utilization reports are accurate.
- 2. Establish a formal procedure for the disposal, retirement and transfer of Duquesne Light Company fleet vehicles.

XIII. INFORMATION TECHNOLOGY

Background

Duquesne Light Company's (DLC or company) Vice President and Chief Information Officer (CIO) is responsible for the information technology (IT) department. Seven directors and one manager lead teams which are under the direction of the CIO. Exhibit XIII-1 displays DLC's Information Technology business unit structure. In addition, Exhibit XIII-2 displays the teams led by these individuals with assigned areas of responsibility.

Exhibit XIII – 1
Duquesne Light Company
Information Technology Organization
As of December 2018



Sources: Data Requests EM-2 and IT-1

Exhibit XIII – 2 Duquesne Light Company Information Technology Areas of Responsibility As of December 2018

Position	IT Team	Responsibilities
Director, IT Project & Services Management	IT Shared Services	Strategic planning, IT governance, IT capabilities maturity advancement
Senior Manager, Information Technology	Office of the CIO	Communications, financial management, sourcing and vendor management, resource management
Managing Director, Enterprise Applications / Business Technology	Project Management Office	Solution lifecycle delivery, project and portfolio management
Managing Director, Operations Applications	Transmission & Distribution Applications	Supervisory Control and Data Acquisition, Advanced Metering Infrastructure, work and asset management
Director, Customer Applications	Customer Care Applications	Oracle based systems
Director, Technical Services	Technology Services	Data center management, tier 1 service desk (less severe help desk issues), voice and network services
Director / CISO	Information Security	Risk and compliance, information security, critical infrastructure protection
Director, Corporate Applications	Corporate Services Applications	Microsoft based systems and big data.

Source: Data Request IT-1

DLC has made efforts to bring more responsibilities in-house for the IT department since 2015. From 2008 through 2014, IT staffing varied from 58 to 66 employees. In 2015, staffing increased to 133 employees, and has increased since then to 190 employees in November 2018. Currently, contractor responsibilities include a mix of short-term assistance, contracted work, and consultants that supplement the responsibilities performed by all the groups detailed in Exhibit XIII-2.

Findings and Conclusions

Our examination of DLC's Information Technology included a review of the organizational structure, staffing levels, operational expenses, policies and procedures, cybersecurity measures, cyber insurance, employee IT training techniques and all related information. Based on our review of DLC's information technology efforts, DLC should initiate or devote additional effort to improving the efficiency and/or effectiveness of the information technology function by addressing the following:

1. Duquesne Light Company's technology capabilities will need to be enhanced in coordination with internal business partners to improve its information technology maturity.

DLC utilizes an IT capability maturity model to determine if it is aligned with industry leading practices. The model scores the maturity level of IT's alignment with IT enablers for value delivery; such as alignment with business strategy, execution of IT project portfolio, and the provision of IT support functions. DLC uses the model to advance the capabilities driven by business needs and objectives across different dimensions. For example, business continuity objectives drive investment in process and organization dimensions within IT to mature disaster recovery and resiliency to support this objective.

In 2017, DLC utilized a third-party to review the five-year IT strategic plan and how it aligns with business strategy and objectives. This assessment included various focused areas of review of the internal structure and operations for the IT department and how it interacts and coordinates with internal business partners. The auditors did not specifically detail the categories and scoring involved in this report due to proprietary ratings systems and confidential information. As a result of this review, DLC set a goal for improvement with a targeted timeframe of year-end 2020 to improve its IT maturity rating.

In 2018, DLC again utilized a third-party consultant to measure progress regarding the IT maturity rating. This consultant concluded technology exceeded its 2018 targeted goal. However, additional efforts to increase IT maturity rating remain for DLC to meet its goal of what it feels is a sufficient IT maturity rating. These efforts include various strategically targeted areas which DLC was actively addressing as of the end of 2018.

Investment in information technology capabilities assists a company to increasingly optimize practices, communications, and planning for IT resources and furthermore better integrates IT into planning with internal business partners. DLC should reevaluate its IT capability needs (either via a third party or in house) once it has reached its goal for an additional 10% increase in the IT maturity rating and determine if it would be worthwhile to consider additional increases in IT capabilities.

Recommendations

1. Continue to improve the information technology score via enhanced information technology capabilities, internal controls and governance, and coordination with internal business partners; furthermore, periodically reevaluate the information technology maturity rating.

XIV. ACKNOWLEDGEMENTS

We wish to express our appreciation for the cooperation and assistance provided by the officers and staff of Duquesne Light Company during this Management and Operations Audit.

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

XV. APPENDICES

Appendix A

Duquesne Light Company Financial and Operating Data and Statistics

Duquesne Light Company Balance Sheet Appendix B

	i manolar and operaning a and oranionos						
	2013	2014	2015	2016	2017	Compound Growth	
Plant In Service							
Land and Land Rights	\$13,922,995	\$14,127,156	\$14,372,308	\$14,372,275	\$13,998,826	0.1%	
Structures and Improvements	\$20,949,551	\$19,889,581	\$19,961,001	\$20,788,043	\$27,517,016	7.1%	
Station Equipment	\$306,537,389	\$314,354,566	\$326,296,183	\$368,853,878	\$385,494,367	5.9%	
Towers and Fixtures	\$67,038,974	\$66,974,245	\$67,259,059	\$67,448,111	\$67,448,111	0.2%	
Poles and Fixtures	\$48,965,458	\$50,060,049	\$50,959,117	\$51,221,719	\$51,454,883	1.2%	
Overhead Conductors and Devices	\$76,741,609	\$78,518,416	\$86,849,127	\$88,824,176	\$93,128,271	5.0%	
Underground Conduit	\$67,312,398	\$67,251,675	\$67,313,638	\$72,313,908	\$80,738,367	4.7%	
Underground Conductors and Devices	\$59,359,865	\$58,888,350	\$84,449,686	\$104,030,476	\$146,289,898	25.3%	
Roads and Trails	\$9,139,829	\$9,186,476	\$9,214,606	\$9,214,850	\$9,214,850	0.2%	
Asset Retirement Costs for Transmission Plant							
Total Transmission Plant	\$669,968,068	\$679,250,514	\$726,674,725	\$797,067,436	\$875,284,589	6.9%	
Land and Land Rights	\$13,038,454	\$13,038,454	\$13,038,454	\$13,038,454	\$13,298,662	0.5%	
Structures and Improvements	\$62,673,492	\$62,128,943	\$63,163,305	\$64,104,499	\$66,790,877	1.6%	
Station Equipment	\$404,816,423	\$409,431,630	\$416,080,551	\$429,113,882	\$440,184,122	2.1%	
Storage Battery Equipment	\$0	\$0	\$0	\$0	\$0		
Poles, Towers, and Fixtures	\$373,972,923	\$393,276,303	\$402,835,490	\$416,581,591	\$427,308,839	3.4%	
Overhead Conductors and Devices	\$368,440,620	\$383,548,097	\$399,198,159	\$416,461,911	\$425,334,381	3.7%	
Underground Conduit	\$111,499,784	\$113,312,260	\$113,579,174	\$131,488,703	\$136,818,407	5.2%	
Underground Conductors and Devices	\$285,235,855	\$306,711,635	\$322,280,245	\$339,993,088	\$358,979,279	5.9%	
Line Transformers	\$310,269,108	\$329,328,419	\$348,336,949	\$362,576,031	\$373,610,044	4.8%	
Services	\$86,551,115	\$86,908,572	\$89,132,851	\$91,811,798	\$94,782,643	2.3%	
Meters	\$96,858,412	\$96,659,598	\$97,046,801	\$102,886,645	\$112,565,579	3.8%	
Installations on Customer Premises	\$0 \$39,298,606	\$0 \$39,612,155	\$0 \$39,080,461	\$0 \$39,197,597	\$0 \$39,417,128	0.1%	
Street Lighting and Signal Systems Asset Retirement Costs for Distribution Plant	\$39,290,000	\$39,612,133	\$59,060,461 \$515,592	\$636,018	\$636,018	0.1%	
Total Distribution Plant	\$2,152,654,792	\$2,233,956,066	\$2,304,288,032	\$2,407,890,217	\$2,489,725,979	3.7%	
Total Plant In Service	\$2,822,622,860	\$2,913,206,580	\$3,030,962,757	\$3,204,957,653	\$3,365,010,568	4.5%	
Total Materials and Supplies							
Assigned - Operations and Maintenance							
Transmission Plant (estimated)	\$2,048,611	\$4,725,350	\$4,304,631	\$3,607,060	\$2,254,553	2.4%	
Distribution Plant (estimated)	\$19,648,902	\$21,903,109	\$18,816,696	\$17,376,142	\$19,831,993	0.2%	
O							
Operating Revenues Sales of Electricity							
Residential Sales	\$409,064,999	\$436,291,950	\$514,897,082	\$530,110,099	\$518,446,827	6.1%	
Commercial Sales	\$222,621,582	\$249,092,286	\$257,742,846	\$242,122,929	\$247,363,994	2.7%	
Industrial Sales	\$46,637,268	\$48,333,872	\$43,714,601	\$43,079,356	\$41,524,040	-2.9%	
Public Street and Highway Lighting Sales	\$12,037,471	\$11,431,891	\$13,124,393	\$12,461,514	\$12,622,924	1.2%	
Total Sales to Ultimate Customers	\$690,361,320	\$745,149,999	\$829,478,922	\$827,773,898	\$819,957,785	4.4%	
Sales for Resale	\$1,453,395	\$1,490,094	\$1,245,301	\$1,143,159	\$1,433,230	-0.3%	
Total Sales of Electricity	\$691,814,715	\$746,640,093	\$830,724,223	\$828,917,057	\$821,391,015	4.4%	
Provision for Rate Refunds	\$11,307,163	\$12,278,361	\$8,982,585	\$17,275,631	\$18,099,256	12.5%	
Total Revenues Net Provisions	\$680,507,552	\$734,361,732	\$821,741,638	\$811,641,426	\$803,291,759	4.2%	
	+ + + + + + + + + + + + + + + + + + + 	V 101,001,102	4021 ,111,000	4011,011,120	4000,201,100	,	
Megawatt Hours Sold							
Sales of Electricity	4 000 000	4 000 045	4 400 70-	4.407.005	0.070.445		
Residential Sales	4,090,906	4,068,016	4,108,765	4,197,290	3,876,119	-1.3%	
Commercial Sales	0.404.0=:	0.404.00=					
Industrial Calas	6,494,254	6,431,805	6,398,676	6,312,878	6,111,717	-1.5%	
Industrial Sales	3,337,255	3,164,231	2,897,650	2,565,611	2,632,037	-5.8%	
Public Street and Highway Lighting Sales	3,337,255 60,635	3,164,231 58,452	2,897,650 78,017	2,565,611 77,762	2,632,037 53,063	-5.8% -3.3%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers	3,337,255	3,164,231	2,897,650	2,565,611	2,632,037	-5.8%	
Public Street and Highway Lighting Sales	3,337,255 60,635	3,164,231 58,452	2,897,650 78,017	2,565,611 77,762	2,632,037 53,063	-5.8% -3.3%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers Sales for Resale Total Sales of Electricity	3,337,255 60,635 13,983,050	3,164,231 58,452 13,722,504	2,897,650 78,017 13,483,108	2,565,611 77,762 13,153,541	2,632,037 53,063 12,672,936	-5.8% -3.3% -2.4%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers Sales for Resale Total Sales of Electricity Average Number of Customers Per Month	3,337,255 60,635 13,983,050	3,164,231 58,452 13,722,504	2,897,650 78,017 13,483,108	2,565,611 77,762 13,153,541	2,632,037 53,063 12,672,936	-5.8% -3.3% -2.4%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers Sales for Resale Total Sales of Electricity Average Number of Customers Per Month Sales of Electricity	3,337,255 60,635 13,983,050 - 13,983,050	3,164,231 58,452 13,722,504 - 13,722,504	2,897,650 78,017 13,483,108 - 13,483,108	2,565,611 77,762 13,153,541 - 13,153,541	2,632,037 53,063 12,672,936 - 12,672,936	-5.8% -3.3% -2.4% -2.4%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers Sales for Resale Total Sales of Electricity Average Number of Customers Per Month Sales of Electricity Residential Sales	3,337,255 60,635 13,983,050 - 13,983,050 526,814	3,164,231 58,452 13,722,504 - 13,722,504 527,512	2,897,650 78,017 13,483,108 - 13,483,108 525,593	2,565,611 77,762 13,153,541 - 13,153,541 526,283	2,632,037 53,063 12,672,936 - 12,672,936 532,204	-5.8% -3.3% -2.4% -2.4%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers Sales for Resale Total Sales of Electricity Average Number of Customers Per Month Sales of Electricity Residential Sales Commercial Sales	3,337,255 60,635 13,983,050 - 13,983,050 526,814 59,698	3,164,231 58,452 13,722,504 - 13,722,504 527,512 60,008	2,897,650 78,017 13,483,108 - 13,483,108 525,593 60,447	2,565,611 77,762 13,153,541 - 13,153,541 526,283 54,064	2,632,037 53,063 12,672,936 - 12,672,936 532,204 59,801	-5.8% -3.3% -2.4% -2.4% 0.3% 0.0%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers Sales for Resale Total Sales of Electricity Average Number of Customers Per Month Sales of Electricity Residential Sales Commercial Sales Industrial Sales	3,337,255 60,635 13,983,050 - 13,983,050 526,814 59,698 1,138	3,164,231 58,452 13,722,504 - 13,722,504 527,512 60,008 1,126	2,897,650 78,017 13,483,108 - 13,483,108 525,593 60,447 1,116	2,565,611 77,762 13,153,541 - 13,153,541 526,283 54,064 1,120	2,632,037 53,063 12,672,936 - 12,672,936 532,204 59,801 1,098	-5.8% -3.3% -2.4% -2.4% 0.3% 0.0% -0.9%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers Sales for Resale Total Sales of Electricity Average Number of Customers Per Month Sales of Electricity Residential Sales Commercial Sales Industrial Sales Public Street and Highway Lighting Sales	3,337,255 60,635 13,983,050 - 13,983,050 526,814 59,698 1,138 2,696	3,164,231 58,452 13,722,504 - 13,722,504 527,512 60,008 1,126 2,776	2,897,650 78,017 13,483,108 - 13,483,108 525,593 60,447 1,116 203	2,565,611 77,762 13,153,541 - 13,153,541 526,283 54,064 1,120 6,487	2,632,037 53,063 12,672,936 - 12,672,936 532,204 59,801 1,098 1,003	-5.8% -3.3% -2.4% -2.4% 0.3% 0.0% -0.9% -21.9%	
Public Street and Highway Lighting Sales Total Sales to Ultimate Customers Sales for Resale Total Sales of Electricity Average Number of Customers Per Month Sales of Electricity Residential Sales Commercial Sales Industrial Sales	3,337,255 60,635 13,983,050 - 13,983,050 526,814 59,698 1,138	3,164,231 58,452 13,722,504 - 13,722,504 527,512 60,008 1,126	2,897,650 78,017 13,483,108 - 13,483,108 525,593 60,447 1,116	2,565,611 77,762 13,153,541 - 13,153,541 526,283 54,064 1,120	2,632,037 53,063 12,672,936 - 12,672,936 532,204 59,801 1,098	-5.8% -3.3% -2.4% -2.4% 0.3% 0.0% -0.9%	

Source: Pa PUC Annual Reports

Duquesne Light Company Financial and Operating Data and Statistics

	2013	2014	2015	2016	2017	Compound Growth
Operation and Maintenance Expenses						
<u>Transmission</u>						
Total Operation	\$4,421,624	\$3,692,027	\$4,912,326	\$6,924,780	\$8,057,064	16.2%
Maintenance Supervision and Engineering	\$366,673	\$418,269	\$368,180	\$415,026	\$1,205,088	34.6%
Maintenance of Structures	\$529,455	\$528,234	\$430,522	\$860,300	\$910,425	14.5%
Maintenance of Station Equipment	\$1,559,235	\$1,749,324	\$1,853,914	\$1,657,115	\$1,729,764	2.6%
Maintenance of Overhead Lines	\$2,509,424	\$1,609,627	\$2,277,305	\$513,297	\$558,863	-31.3%
Maintenance of Underground Lines	\$0	\$0	\$0	\$0	\$38,277	
Maintenance of Misc.Transmission Plant	\$99,860	\$902,621	\$253,520	\$375,996	\$204,812	19.7%
Total Maintenance	\$5,064,647	\$5,208,075	\$5,183,441	\$3,821,734	\$4,647,229	-2.1%
Total Transmission O&M Expenses	\$9,486,271	\$8,900,102	\$10,095,767	\$10,746,514	\$12,704,293	7.6%
<u>Distribution</u>						
Total Operation	\$13,527,832	\$14,155,888	\$14,736,789	\$15,697,191	\$15,940,535	4.29
Maintenance Supervision/Engineering	\$176,749	\$98,715	\$58,196	\$352,472	(\$816)	N/
Maintenance of Structures	\$199,425	\$182,383	\$171,311	\$131,232	\$106,677	-14.5%
Maintenance of Station Equipment	\$3,205,506	\$2,776,087	\$2,572,696	\$2,754,423	\$2,977,612	-1.8%
Maintenance of Overhead Lines	\$19,181,578	\$21,789,485	\$22,326,432	\$26,475,164	\$20,010,643	1.1%
Maintenance of Underground Lines	\$1,489,401	\$1,488,556	\$1,558,867	\$1,344,312	\$1,267,378	-4.0%
Maintenance of Line Transformers	\$9,145	\$41,734	\$65,614	\$35,076	\$52,651	54.9%
Maintenance of Street Lighting/Signal Systems	\$435,592	\$382,418	\$410,073	\$388,530	\$484,069	2.7%
Maintenance of Meters	\$916,267	\$1,038,316	\$1,133,845	\$413,526	\$536,955	-12.5%
Maintenance of Misc. Distribution Plant	\$152,870	\$105,352	\$172,545	\$274,618	\$147,687	-0.9%
Total Maintenance	\$25,766,533	\$27,903,046	\$28,469,579	\$32,169,353	\$25,582,856	-0.2%
Total Distribution O&M Expenses	\$39,294,365	\$42,058,934	\$43,206,368	\$47,866,544	\$41,523,391	1.4%
Total Transmission and Distribution Expenses	\$48,780,636	\$50,959,036	\$53,302,135	\$58,613,058	\$54,227,684	2.7%
Customer Service and Info. Expenses						
Supervision	\$0	\$0	\$0	\$0	\$0	
Customer Assistance Expenses	\$29,038,390	\$25,728,690	\$41,641,910	\$34,761,182	\$36,875,201	6.2%
Information and Instructional Expenses	\$0	\$25,720,030	\$0	\$0	\$0	0.27
Misc Customer Service and Info. Expenses	\$0	\$0	\$0	\$0	\$0 \$0	
Total Customer Service and Info. Expenses	\$29,038,390	\$25,728,690	\$41,641,91 0	\$34,761,182	\$36,875,2 0 1	6.2%
Total Customer Service and into. Expenses	\$29,030,390	\$23,720,090	\$41,041,910	\$34,701,102	\$30,873,201	0.2 /
Administrative and General Expenses						
Administrative and General Salaries	\$17,057,549	\$20,030,997	\$25,527,094	\$27,876,268	\$29,373,016	14.6%
Office Supplies and Expenses	\$6,107,826	\$4,976,487	\$5,858,605	\$5,280,146	\$3,009,014	-16.2%
Outside Services Employed	\$13,034,721	\$15,848,252	\$20,624,481	\$20,576,367	\$21,722,334	13.6%
Property Insurance	\$5,213,818	\$5,487,118	\$5,554,979	\$5,520,215	\$5,343,577	0.6%
Injuries and Damages	\$1,045,155	\$740,965	\$1,175,795	\$584,253	\$797,935	-6.5%
Employee Pension and Benefits	\$37,780,994	\$32,357,990	\$29,818,228	\$29,425,711	\$30,241,972	-5.4%
Regulatory Commission Expenses	\$959,395	\$4,439,188	\$3,050,542	\$998,533	\$870,027	-2.4%
General Advertising Expenses	\$420,426	\$660,248	\$1,213,769	\$2,389,761	\$1,573,959	39.1%
Miscellaneous General Expenses	\$6,460,077	\$5,368,744	\$8,537,364	\$13,660,954	\$6,181,384	-1.1%
Rent	\$2,506,341	\$2,689,863	\$3,166,197	\$3,200,585	\$3,410,737	8.0%
Total Admin. And General Expenses	\$90,586,302	\$92,599,852	\$104,527,054	\$109,512,793	\$102,523,955	3.1%
Total Operation & Maintenance Expenses	\$168,405,328	\$170,418,878	\$181,214,780	\$204,456,838	\$195,898,195	3.9%
Disposition of Energy (Megawatt Hours)						
Sales to Ultimate Customers	13,983,050	13,722,504	13,483,108	13,153,540	12,672,936	-2.4%
Sales for Resale	24,223	24,835	20,755	19,051	23,887	-0.3%
Energy Used by Company	29,247	30,071	-	-	-	-100.0%
Total Energy Losses	812,395	814,427	828,572	871,710	837,272	0.8%
Energy Loss as a Percent of Total Available	5.5%	5.6%	5.8%	6.2%	6.2%	3.19
Total Energy Available	14,848,915	14,591,837	14,332,435	14,044,301	13,534,095	-2.3%
		, ,	, , 22	,- ,	, ,	

Source: Pa PUC Annual Reports

Duquesne Light Company Balance Sheet

BALANCE SHEET	2013	2014	2015	2016	2017	Compound Growth
UTILITY PLANT						
Utility Plant	\$3,104,067,795	\$3,333,341,127	\$3,502,846,383	\$3,733,899,875	\$3,932,301,347	6.1%
Construction Work in Progress	\$389,941,306	\$330,038,458	\$345,074,916	\$293,305,838	\$308,024,664	-5.7%
TOTAL UTILITY PLANT	\$3,494,009,101	\$3,663,379,585	\$3,847,921,299	\$4,027,205,713	\$4,240,326,011	5.0%
Accum. Depreciation and Amortization	\$1,040,982,670	\$1,110,443,480	\$1,158,650,973	\$1,224,905,801	\$1,300,604,573	5.7%
NET UTILITY PLANT	\$2,453,026,431	\$2,552,936,105	\$2,689,270,326	\$2,802,299,912	\$2,939,721,438	4.6%
OTHER PROPERTY AND INVESTMENTS	+=,100,0=0,101	+-,,,	+=,,	+-,,,	+=,,,	11070
Nonutility Property	\$2,507,304	\$2,212,313	\$2,212,313	\$4,133,071	\$4.508.782	15.8%
Accum. Depreciation and Amortization	(\$294,991)	\$0	\$0	\$0	(\$331,890)	3.0%
Investments in Associated Companies	\$0	\$0	\$0	\$0	\$0	NA
Investment in Subsidiary Companies	\$6,876,533	\$7,406,934	\$7,955,583	\$8,427,968	\$0	-100.0%
Other Investments	\$255,772	\$255.772	\$255,772	\$247,000	\$247.000	-0.9%
		,		. ,	+ ,	
Long Term Portion of Derivative Assets	\$0	\$1,272,621	\$0	\$0	\$0	NA 47.00/
Special Funds	\$1,153,850	\$1,254,250	\$1,489,929	\$539,100	\$539,100	-17.3%
TOTALS	\$10,498,468	\$12,401,890	\$11,913,597	\$13,347,139	\$4,962,992	-17.1%
CURRENT AND ACCRUED ASSETS	05 404 005	00 007 500	04.004.040	#5.000.500	00.450.404	0.00/
Cash	\$5,401,295	\$8,307,538	\$4,331,916	\$5,262,590	\$6,156,491	3.3%
Special Deposits	\$0	\$0	\$0	\$0	\$0	NA
Working Fund	\$9,500	\$9,500	\$9,500	\$10,000	\$10,000	1.3%
Temporary Cash Investments	\$58,000,000	\$12,300,000	\$36,000,000	\$27,000,000	\$18,000,000	-25.4%
Notes Receivable	\$0	\$0	\$0	\$0	\$0	NA
Customer Accounts Receivable	\$123,138,054	\$138,991,416	\$150,991,431	\$158,467,661	\$150,541,701	5.2%
Other Accounts Receivable	\$11,381,331	\$34,453,374	\$23,078,586	\$19,184,140	\$9,135,474	-5.3%
Accum. for Uncollectible Accounts	(\$17,572,537)	(\$19,617,982)	(\$22,445,760)	(\$25,686,619)	(\$18,912,134)	1.9%
Notes Receivable from Assoc. Companies	\$0	\$0	\$0	\$0	\$0	NA
Accts Receivable from Assoc. Companies	\$885,418	\$629,361	\$348,338	\$549,697	\$8,079	-69.1%
Plant Materials and Operating Supplies	\$23,438,023	\$29,175,625	\$25,838,529	\$22,952,195	\$23,563,275	0.1%
Stores Expense Undistributed	\$0	\$0	\$0	\$0	\$0	NA
Prepayments	\$4,080,654	\$3,525,671	\$7,684,069	\$6,934,120	\$9,444,714	23.3%
Interest and Dividends Receivable	\$3,002	\$1,069	\$6,538	\$5,347	\$17,778	56.0%
Derivative Instrument Assets		(\$23,953)	\$0	\$0	\$0	NA
Miscellaneous Current and Accrued Assets	\$13.618	\$0	\$0	\$0	\$0	-100.0%
TOTALS	\$208,778,358	\$207,751,619	\$225,843,147	\$214,679,131	\$197,965,378	-1.3%
DEFERRED DEBITS						
Unamortized Debt Expenses	\$4,927,037	\$4,984,674	\$6,588,965	\$6,266,458	\$6,394,028	6.7%
Extraordinary Property Losses	\$0	\$0	\$0	\$0	\$0	NA
Unrecovered Plant and Regulatory Study	\$0	\$0	\$0	\$0	\$0	NA
Other Regulatory Assets	\$524,711,792	\$607,222,028	\$593,820,646	\$590,132,034	\$259,159,929	-16.2%
Clearing Accounts	\$0	\$0	\$0	\$0	\$0	NA
Temporary Facilities	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	NA NA
Misc. Deferred Debits	\$1.577.208	\$1.486.152	\$1.573.750	\$1.385.456	\$1.459.927	-1.9%
	\$1,577,208	* ,, -	\$1,573,750 \$0	+ ,,	* ,,-	
Def. Losses from Disposition of Plant	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	NA NA
Research, Devel. and Demonstration	* -	* -	* -	* -	• •	NA 7.50/
Unamortized Loss on Reacquired Debt	\$31,509,869	\$29,310,145	\$27,192,032	\$25,107,368	\$23,022,703	-7.5%
Accum. Deferred Income Taxes	\$138,706,680	\$184,169,814	\$178,559,965	\$175,306,422	\$252,720,432	16.2%
TOTALS	\$701,432,586	\$827,172,813	\$807,735,358	\$798,197,738	\$542,757,019	-6.2%
TOTAL ASSETS AND OTHER DEBITS	\$3,373,735,843	\$3,600,262,427	\$3,734,762,428	\$3,828,523,920	\$3,685,406,827	2.2%

NA - Not Applicable Source: Pa PUC Annual Reports

Duquesne Light Company Balance Sheet

BALANCE SHEET	2013	2014	2015	2016	2017	Compound Growth
PROPRIETARY CAPITAL						
Common Stock Issued	\$10	\$10	\$10	\$10	\$0	-100.0%
Preferred Stock Issued	\$107,935,500	\$107,935,500	\$32,985,500	\$32,985,500	\$0	-100.0%
Premium on Capital Stock	\$137,344	\$137,344	\$137,344	\$137,344	\$0	-100.0%
Donations from Stockholders	\$99,090,351	\$99,090,351	\$99,090,351	\$99,090,351	\$99,090,351	0.0%
Gain on Required Capital Stock	\$383,677,737	\$383,677,737	\$381,775,615	\$381,775,615	\$380,598,802	-0.2%
Other Paid-in Capital Stock	\$505,658,433	\$505,658,433	\$505,658,433	\$505,658,433	\$505,658,443	0.0%
Capital Stock Expense	(\$2,162,283)	(\$2,162,283)	(\$262,929)	(\$262,929)	\$0	-100.0%
Appropriated Retained Earnings	\$0	\$0	\$0	\$0	\$0	NA
Unappropriated Retained Earnings	\$135,191,276	\$151,932,893	\$176,695,772	\$202,437,554	\$226,448,322	13.8%
Unappropriated Undistributed Subsidiary Earnings	(\$15,952,224)	(\$15,421,823)	(\$14,873,174)	(\$14,400,789)	\$0	-100.0%
Reacquired Capital Stock	\$0	\$0	\$0	\$0	\$0	NA
Accumulated Other Comprehensive Income	(\$12,398,460)	(\$11,767,784)	(\$7,967,839)	\$1,754,576	\$266,274	NA
TOTALS	\$1,201,177,684	\$1,219,080,378	\$1,173,239,083	\$1,209,175,665	\$1,212,062,192	0.2%
LONG-TERM DEBT	. , , ,	. , , ,	.,,,		. , , ,	
Bonds	\$460,000,000	\$490,000,000	\$950,000,000	\$950,000,000	\$1,010,000,000	21.7%
Reacquired Bonds	\$0	\$0	\$0	\$0	\$0	NA
Advances from Associated Companies	\$300,000,000	\$200,000,000	\$0	\$0	\$0	-100.0%
Other Long-Term Debt	\$109,905,000	\$109,905,000	\$109,905,000	\$109,905,000	\$109,905,000	0.0%
Unamortized Premium on Long-Term Debt	\$0	\$0	\$0	\$0	\$0	NA
Unamortized Discount on Long-Term Debt	\$0	\$0	\$0	\$0	\$0	NA
TOTALS	\$869,905,000	\$799,905,000	\$1,059,905,000	\$1,059,905,000	\$1,119,905,000	6.5%
OTHER NONCURRENT LIABILITIES						
Obligations Under Capital Leases-Noncurrent	\$0	\$0	\$0	\$0	\$0	NA
Accum. Provision for Property Insurance	\$0	\$0	\$0	\$0	\$0	NA
Accum. Provision for Injuries and Damages	\$4,313,866	\$5,400,402	\$5,295,813	\$5,149,176	\$5,044,068	4.0%
Accum. Provision for Pensions and Benefits	\$58,590,449	\$54,928,123	\$48,586,021	\$29,926,097	\$28,976,096	-16.1%
Accum. Misc. Operating Provisions	\$1,804,000	\$2,078,000	\$2,078,000	\$2,257,766	\$2,611,268	9.7%
Asset Retirement Obligations	\$0	\$591,503	\$626,839	\$2,443,106	\$1,682,885	NA
Accum. Provision for Rate Refunds	\$0	\$0	\$0	\$0	\$0	NA NA
TOTALS	\$64,708,315	\$62,998,028	\$56,586,673	\$39,776,145	\$38,314,317	-12.3%
CURRENT AND ACCRUED LIABILITIES	(1) (1)	, , , , , , , , , , , , , , , , , , ,	, , , , , , , ,	(11)	, , , , , ,	
Notes Payable	\$0	\$100,000,000	\$0	\$0	\$49,999,993	NA
Accounts Payable	\$92,950,602	\$106,545,881	\$122,228,943	\$117,221,273	\$118,525,950	6.3%
Notes Payable to Associated Companies	\$0	\$0	\$0	\$0	\$0	NA
Account Payable to Associated Companies	\$11,587,176	\$9,157,792	\$4,984,808	\$266,647	\$281,750	-60.5%
Customer Deposits	\$8,020,746	\$7,686,487	\$7,800,621	\$9,950,786	\$11,509,455	9.4%
Taxes Accrued	\$38,106,024	\$15,267,306	\$10,582,076	\$5,693,166	\$13,819,233	-22.4%
Interest Accrued	\$9,216,710	\$10,569,972	\$15,369,251	\$15,417,006	\$16,043,635	14.9%
Dividends Declared	\$0	\$0	\$0	\$0	\$0	NA
Matured Long-Term Debt	\$0	\$0	\$0	\$0	\$0	NA
Matured Interests	\$0	\$0	\$0	\$0	\$0	NA
Tax Collections Payable	\$606,978	\$947,887	\$719,964	\$631,115	\$861,624	9.2%
Misc. Current and Accrued Liabilities	\$20,550,584	\$26,064,888	\$29,087,996	\$34,200,310	\$28,494,009	8.5%
Derivative Instrument Liabilities	\$0	\$2,082,654	\$0	\$0	\$0	NA
TOTALS	\$181,038,820	\$278,322,867	\$190,773,659	\$183,380,303	\$239,535,649	7.3%
DEFERRED CREDITS	, , ,,,,,,,,	· -/- /	, , , , , , , , ,	, 11,111,111	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Customer Advances for Construction	\$1,500,000	\$3,981,963	\$125,452	\$326,500	\$2,309,317	11.4%
Accum. Deferred Investments Tax Credits	\$0	\$0	\$0	\$0	\$0	NA
Def. Gains from Disposition of Utility Plant	\$0	\$0 \$0	\$0 \$0	\$0	\$0	NA NA
Other Deferred Credits	\$207,387,366	\$287,791,425	\$268.070.110	\$259.059.417	\$135.656.420	-10.1%
Other Regulatory Liabilities	\$8,946,254	\$28,482,353	\$39,291,150	\$36,470,577	\$175,309,927	110.1%
Unamortized Gain on Reacquired Debt	\$0,940,234	\$20,462,333	\$39,291,130	\$30,470,577	\$175,509,927	110.4% NA
·	\$839.072.404	\$919.700.413	\$946,771,301	\$1,040,430,313	\$762,314,005	-2.4%
Accum Deferred Income Tayes		ψυ ι υ, / UU, 4 I δ	₩ 24 U.//I.3UI	₩1.U 4 U.43U.3 3	## UZ.314.UU3	-2.4%
Accum. Deferred Income Taxes	******	\$1 230 0EC 4E4				0.40/
Accum. Deferred Income Taxes TOTALS TOTAL LIABILITIES AND OTHER CREDITS	\$1,056,906,024 \$3,373,735,843	\$1,239,956,154 \$3,600,262,427	\$1,254,258,013 \$3,734,762,428	\$1,336,286,807 \$3,828,523,920	\$1,075,589,669 \$3,685,406,827	0.4%

NA - Not Applicable Source: Pa PUC Annual Reports

