



INDEPENDENCE
★ MISSOURI ★

INDEPENDENCE POWER & LIGHT

AN EFFICIENCIES AND EFFECTIVENESS PERFORMANCE AUDIT

July 2020

City of Independence, Missouri
City Management Analyst

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DATE: July 10, 2020

TO: Councilwoman Karen Deluccie, Audit and Finance Committee Chair
Councilman John Perkins, Audit and Finance Committee Member
Councilman Daniel Hobart, Audit and Finance Committee Member

FROM: Mark Thoma-Perry, City Management Analyst

RE: Independence Power and Light Performance Audit

This audit was conducted at the request of the Audit and Finance Committee. On August 23, 2019 this Committee unanimously approved the audit in order to “analyze the efficiency and effectiveness of current IPL programs and services by compiling data on costs and performance metrics so that strategic and sustainable budget changes can be implemented and IPL customers are provided low-cost, environmentally friendly, and reliable electric energy service.”

The audit report is in two sections:

- Finding and Recommendations
- Activity Budget and Performance Metrics

The report makes 15 recommendations based on five primary findings:

- The timekeeping and payroll practices within the Transmission and Distribution division lack adequate accountability and create the opportunity for malfeasance.
- The Labor/Management relationship needs to be brought back into balance.
- Numerous cost-saving opportunities exist within Transmission and Distribution operations
- Operation and maintenance of the CTUs will require less than the \$4.2 million and the 17 positions listed in the City Manager’s Recommended Budget for FY 2021
- Equipment failures and decay cause 9% of electric outages

Objectives

This performance audit is authorized under the authority of Article II, Section 11 of the Charter of Independence, Missouri, which establishes the City Management Analyst and outlines the city management analyst’s primary duties. The purpose of a performance audit, according to federal auditing standards, is to “provide objective analysis to assist management and those charged with governance and oversight in using the information to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.”¹

Scope and Methodology

The review focuses on the efficiency and effectiveness of Independence Power and Light programs and services. Audit methods included:

¹ Comptroller General of the United States, Government Auditing Standards (Washington, DC: U.S. Government Printing Office, 2011), p. 17.

- Reviewing the city-hired consultant's 2000 and 2001 impact fee studies to gain an understanding of arterial street impact fees.
- Interviewing IPL Managers to understand the scope of their managerial responsibilities; reviewing documents, management reports and required regulatory reports provided by them
- Conducting field tours of IPL facilities and distribution system
- Reviewing records from the City's Financial and Human Resource systems, Payroll, the CityWorks Work Order and Inventory systems and the IPL Outage Management System system,
- Reviewing the Memorandum of Agreement between the City and IBEW Local 53,
- Reviewing the City's Personnel Policies and Procedures

This performance audit was conducted with guidance from accepted government auditing standards. Those standards require that the audit is designed to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on audit objectives. The evidence obtained provides a reasonable basis for the findings and recommendations. No information was omitted from this report because it was deemed privileged or confidential.

The audit report was made available to the City Manager, Assistant City Manager and the acting IPL General Manager on June 5, 2020 for review and comment; their comments are included in the appendix. Thank you to the IPL Managers and management staff for their assistance and cooperation during this audit.

Independence Power & Light Activity Budget and Performance Metrics

Transmission and Distribution

The Transmission and Distribution (T&D) Division of Independence Power and Light (IPL) consists of multiple activities organized around the mission of providing safe, efficient and reliable electric service at all levels to all IPL customers.

The following activities comprise T&D:

- Maintain Overhead and Underground transmission and distribution electrical system
- Operate and maintain Substation facilities
- Review and approve of all electrical permit applications
- Supervise the electrical inspection process for residential & commercial installations
- Install, remove, maintain and test electric meters
- Provide vegetation management services, including power line clearance and tree removal
- Maintain and operate streetlights and private security lights

Budget and Personnel Highlights

The FY20 Budget and Personnel by Activity table lists ten distinct efforts by the Division to maintain safe and reliable electric service. Each of these Activities is discussed in further detail following. The Expenditures table below provides the three most recent adopted budgets, two years of actual expenditures and the current revised budget for Fiscal Year 2019-20.

FY20 Budget and Personnel by Activity		
Activity	Budget	FTEs
Administration	\$361,081	2.0
Overhead	\$2,916,882	15.8
Underground	\$2,803,094	14.7
General Services	\$970,749	5.2
Troubleshooting	\$827,085	4.2
Tree Trimming	\$3,362,860	2.0
Substations	\$1,197,483	6.0
Meter Shop	\$834,205	5.0
Inspections	\$342,752	2.0
Utility Maintenance	\$361,154	2.1
Equipment	\$28,500	0.0
Total	\$14,005,845	59.0

- There are two significant changes from the FY19 Adopted Budget to the FY20 Adopted Budget:
 - The Salary line decreased because the Dispatchers were moved into the System Operations budget; and
 - The Benefits line increased because retiree health insurance was included in this budget.
- Professional Services includes all of the contracts used by the Division for landscaping, utility location services and tree trimming (about 90% of these Services)
 - Actual expenditures for tree trimming in FY19 was \$3.1 million
 - The FY20 Revised Budget reflects a \$500,000 funding reduction for tree trimming.

- Actual Overtime expenditures in FY18 reflect IPL's participation in hurricane recovery efforts. All costs were reimbursed by FEMA.

Transmission & Distribution Expenditures						
Expenditure Type	FY 2017-18		FY 2018-19		FY 2019-20	
	Adopted Budget	FY 2017-18 Actual	Adopted Budget	FY 2018-19 Actual	Adopted Budget	FY 2019-20 Adjusted Budget
Salary	\$ 6,876,205	\$ 6,990,777	\$ 6,817,634	\$ 6,985,153	\$ 6,526,910	\$ 6,332,608
Benefits	2,144,743	2,272,454	1,998,150	2,231,355	2,405,817	2,333,979
Overtime	717,310	2,129,644	1,135,668	1,142,799	1,135,668	1,135,668
Sub-Total Personnel	\$ 9,738,258	\$ 11,392,875	\$ 9,951,452	\$ 10,359,307	\$ 10,068,395	\$ 9,802,255
Operating Costs	390,350	381,102	355,850	333,309	378,000	418,662
Professional Services	2,816,950	3,292,088	3,530,950	3,461,232	3,530,950	3,030,950
Equipment	28,500	32,848	28,500	4,930	28,500	36,856
Total	\$ 12,974,058	\$ 15,098,912	\$ 13,866,752	\$ 14,158,778	\$ 14,005,845	\$ 13,288,723

Overhead Line Maintenance

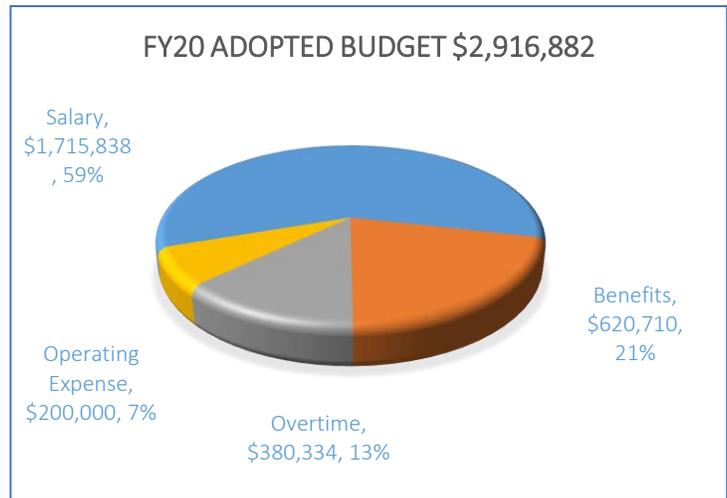
The purpose of the Overhead Line Maintenance activity is to provide maintenance for all of the poles, conductors, transformers and electrical devices in the Overhead Line system so that safe and reliable electric service is delivered to consumers.

The Overhead electrical system has a total of 640.5 miles that transmit and distribute power to IPL customers. The system includes 564.3 miles of distribution lines, 25.2 miles of 161Kv transmission lines and 51.0 miles of 69 Kv transmission lines. Additionally, the system utilizes an estimated 19,750 poles and XXX transformers for the service delivery.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Overhead activity of T&D is \$2.92 million for personnel and operating costs. This budget includes funding for 15.8 positions.

FY20 Personnel	
T&D Superintendent	0.8
Crew Leader	4.0
Journeyman Lineman	8.0
Apprentice Linemen	3.0
Total	15.8



Service Efforts and Accomplishments

During Calendar Year 2019 Overhead personnel spent 22,333 hours maintaining the whole electric transmission and distribution system. Over 90% of this time was working on repairing and installing the Overhead Line System, as you can see in the Table below. The remaining part of their time went toward the underground and substation elements of the system.

The budgeted cost per position is \$184,613. The cost per mile of overhead distribution line is \$5,169.

Overhead Line Maintenance Work Order Type	Hours	%
Overhead Lines	6,888	31%
Conductors & Devices	5,829	26%
Poles & Fixtures	5,045	23%
Removing Junk/Salvage	2,082	9%
New Transformer	649	3%
Conduit	283	1%
Underground Lines	198	1%
Underground Residential Distribution (URD System)	165	1%
Public Street Lighting	108	0%
OH Service Drops	150	1%
All Other	937	4%
Grand Total	22,333	

Underground Line Maintenance

The purpose of the Underground Line Maintenance activity is to provide maintenance for all of the conductors, transformers and electrical devices in the Underground system so that safe and reliable electric service is delivered to consumers.

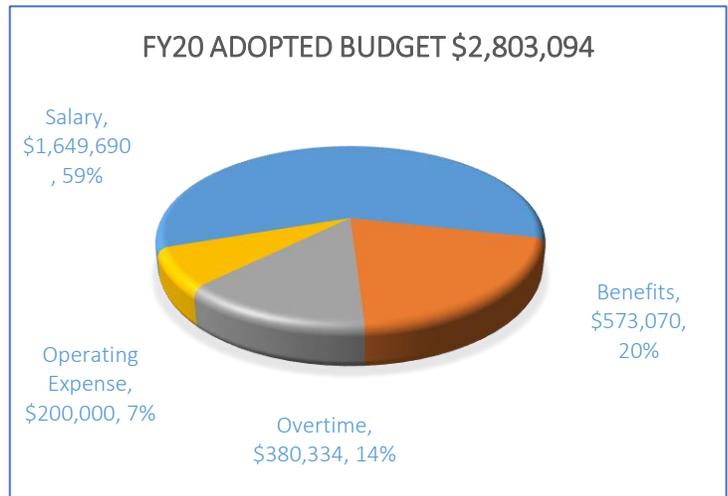
The Underground electrical distribution system has a total of 228.7 miles of lines.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Underground activity of T&D is \$2.80 million for personnel and operating costs.

This budget includes funding for 16.7 positions. The budgeted cost per position is \$190,687.

FY20 Personnel	
T&D Superintendent	0.7
Crew Leader	4.0
Journeyman Lineman	8.0
Apprentice Linemen	1.0
Inspector/Locator	<u>1.0</u>
Total	14.7



Service Efforts and Accomplishments

During Calendar Year 2019 Underground personnel spent 20,368 hours maintaining the whole electric transmission and distribution system. About 67% of this time was working on repairing and installing the Underground Line System, as you can see in the Table below. The remaining part of their time went toward the overhead and substation elements of the system. The cost per mile of underground distribution line is \$12,257.

Underground Work Order Type	Hours	%
Conductors & Devices	4,276	21%
Public Street Lighting	2,881	14%
UG Lines	2,873	14%
Conduit	2,086	10%
URD Systems	1,583	8%
OH Lines	1,203	6%
Services & Conduit	1,076	5%
Poles & Fixtures	777	4%
OH Service Drops	690	3%
Meters - Lineman/Shop	679	3%
All Other	2,244	11%
Grand Total	20,368	

General Services

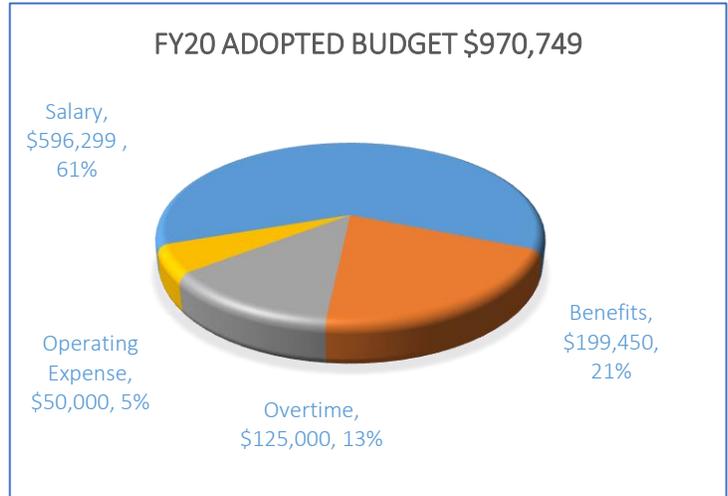
The purpose of the General Services activity is to provide support services for both the overhead and underground line systems so that safe and reliable electric service is delivered to consumers. Often these services are the connections made to the customer from the distribution line and assistance with maintenance activities such as bringing down lines for tree clearance or other needs.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the General Service activity of T&D is \$0.97 million. The cost per mile of underground distribution line is \$1,117.

This budget includes funding for 5.2 positions. The budgeted cost per position is \$186,683.

FY20 Personnel	
T&D Superintendent	0.2
Crew Leader	1.0
Journeyman Lineman	4.0
Total	5.2



Service Efforts and Accomplishments

During Calendar Year 2019 General Services staff spent 8,107 hours in the field. Between 30 – 45% of that time was doing underground line work. Between 17 – 32% of that time was doing overhead line work. Between 24 – 38% of time was connecting and reconnecting service lines and meters.

General Services Work Order Type	Hours	%
URD Systems	2,413	30%
OH Service Drops	1,928	24%
OH Lines	1,361	17%
Conductors & Devices	1,183	15%
Meters - Lineman/Shop	600	7%
All Other	623	7%
Grand Total	8,107	

Troubleshooting

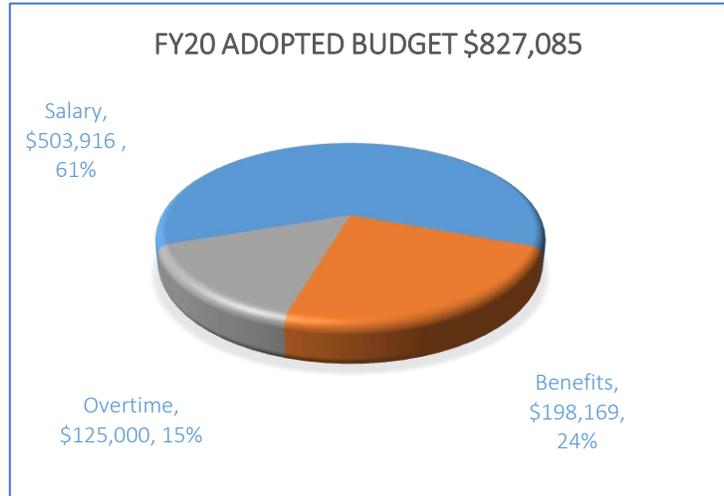
The purpose of the Troubleshooting activity is to respond to trouble and emergency calls of all types and either make the necessary repairs or recommend appropriate action so that the problem is cleared and electrical service restored.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the General Service activity of T&D is \$0.83 million. The cost per mile is \$952.

This budget includes funding for 4.2 positions to perform the duties necessary to maintain reliable electrical service. The budgeted cost per position is \$196,925.

FY20 Personnel	
T&D Superintendent	0.2
Troubleman	4.0
Total	4.2



Service Efforts and Accomplishments

During Calendar Year 2019 Troubleshooters spent 8,168 hours in the field. The variety of work orders is displayed in the table.

Troubleshooting Work Order Type	Hours	%
Public Street Lighting	1,756	21%
OH Lines	1,249	15%
Conductors & Devices	1,228	15%
Meters - Lineman/Shop	1,082	13%
Poles & Fixtures	701	9%
OH Service Drops	661	8%
Line Transformer	545	7%
UG Lines	440	5%
Private Outdoor Lighting	300	4%
All Other	206	3%
Grand Total	8,168	

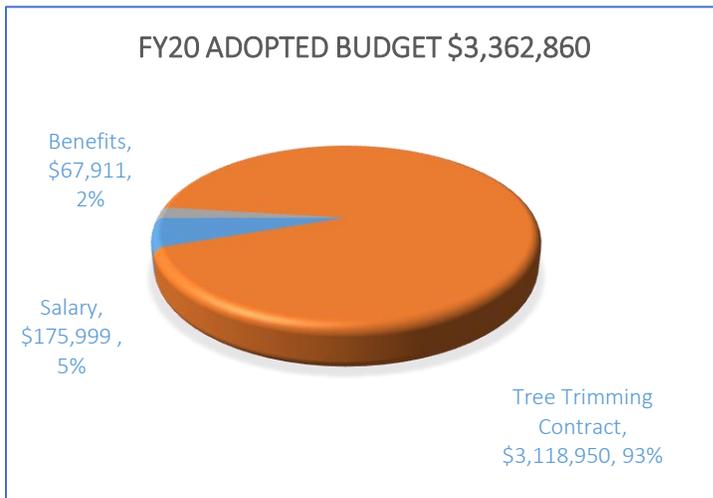
Tree Trimming/Vegetation Management

The purpose of the Tree Trimming/Vegetation Management activity is to trim and remove trees and vegetation adjacent to overhead power lines according to ANSI 300 Standards so that tree and vegetation related outages of electric service are limited to less than 10% of total outages.

The electrical system is trimmed on a five-year cycle for rear easements and a three-year cycle for street easements. The schedule is determined by the growth rate of trees in relation to the powerlines, tree-related outages and importance of customers (Hospitals, Police Department, etc.).

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Tree Trimming activity of T&D is \$3.4 million, including \$0.24 million for two positions.



FY20 Personnel	
Arborist	1.0
Tree Trimming Superintendent	<u>1.0</u>
Total	2.0

Service Efforts and Accomplishments

During Calendar Year 2019 more than 10,800 trees were either trimmed or removed.

Tree Trimming Metrics	Units	Unit Cost
Trees Trimmed	5,474	
Trees over 4" diameter removed	5,334	
Total Hours Worked	42,669	\$70.31/hour
Full-Time Equivalent (FTE) positions (2,080 hrs/fte)	20.5	\$146,341/fte
Average Trees Trimmed per FTE	267	
Average Trees Trimmed per FTE	260	

Substations

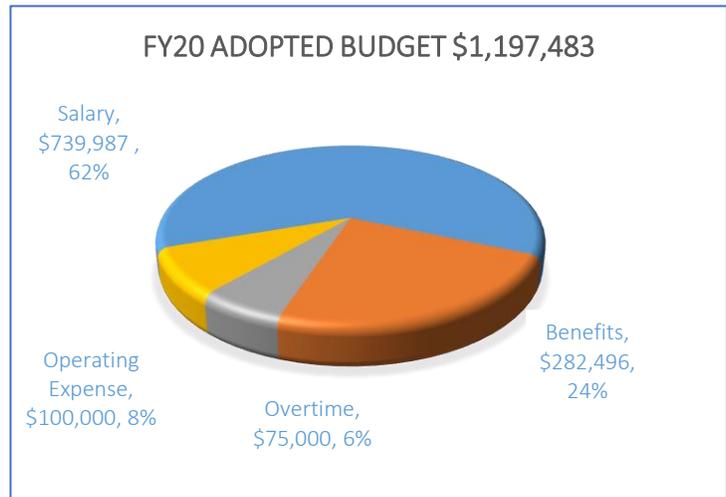
The purpose of the Substation activity is to operate and maintain the IPL electric substation facilities so that safe and reliable electric service is provided to consumers.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Substation activity of T&D is \$1.10 million for personnel.

This budget includes funding for six positions.

FY20 Personnel	
T&D Superintendent	1.0
Relay Technician	2.0
Substation Foreman	1.0
Substation Lineman	2.0
Total	6.0



Service Efforts and Accomplishments

During Calendar Year 2019 Substation personnel spent 9,028 hours maintaining and operating the substations. About 91% of this time was spent on the Distribution system and 9% on the Transmission side.

An additional 114 hours, or one percent, was expended working on other aspects of the electric system.

- Installed new SEL relays in Sub B switchgear
- Replaced stolen copper at Sub K
- Monthly NERC testing
- Completed wiring/relay settings for new Sub P circuit
- Replaced metering T-1 and T-2 at Sub H
- Monthly battery testing
- Repaired Breaker N-069-9
- Annually test oil on substation transformers
- Work with Engineering on study of distribution switchgears on underground circuits
- Installed new line jumpers at Eckles Substation on the Pittsville 161kv line.

Substation Work Order Type	Hours	%
Distribution Operations/Maintenance	7,213	79%
Distribution Supervision/Engineering	991	11%
Transmission Supervision/Engineering	642	7%
Transmission Operations/Maintenance	182	2%
OH Lines	40	0.4%
Conductive Devices	29	0.3%
Meters	24	0.3%
Service Drops	21	0.2%
Grand Total	9,142	

Meter Shop

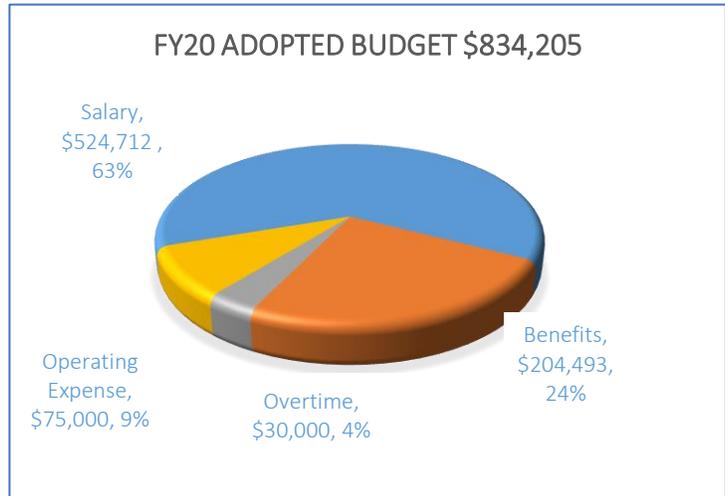
The purpose of the Meter Shop activity is to install, remove, maintain and test the electrical meters in the IPL electrical distribution system so that electric consumption is correctly measured.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Substation activity of T&D is \$0.76 million for personnel.

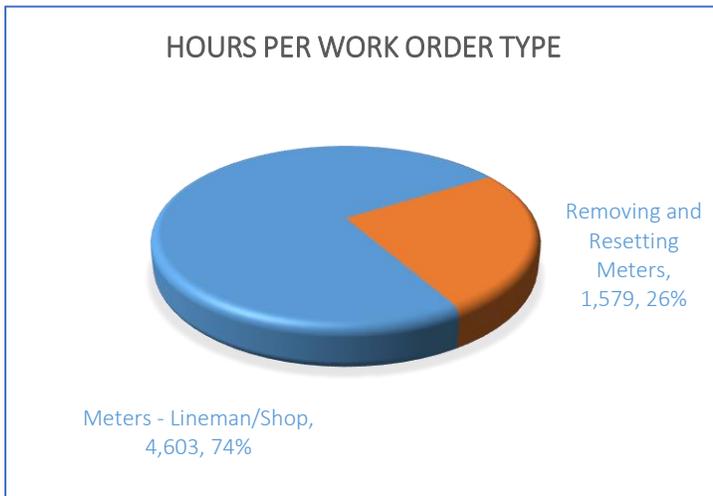
This budget includes funding for 4.75 positions.

FY20 Personnel	
T&D Superintendent	0.75
Meter Records Clerk	1.00
Meter Foreman	1.00
Journeyman Meterman	2.00
Total	4.75



Service Efforts and Accomplishments

During Calendar Year 2019 Meter personnel spent 6,182 hours maintaining electric meters. 2,525 work orders were opened – 41.2% of those were to complete meter installations.



Meter Work Orders Opened in 2019	
Complete Meter Installation	1,041
Meter Check	607
Deliver Meter Can	336
Install Temporary Meter	118
Change Out Meter	104
Tampering/Diversion – Meter	78
Pull Meter	67
Install Meter	38
Test Meter	28
All Other	72
Total	2,525

Electrical Inspections

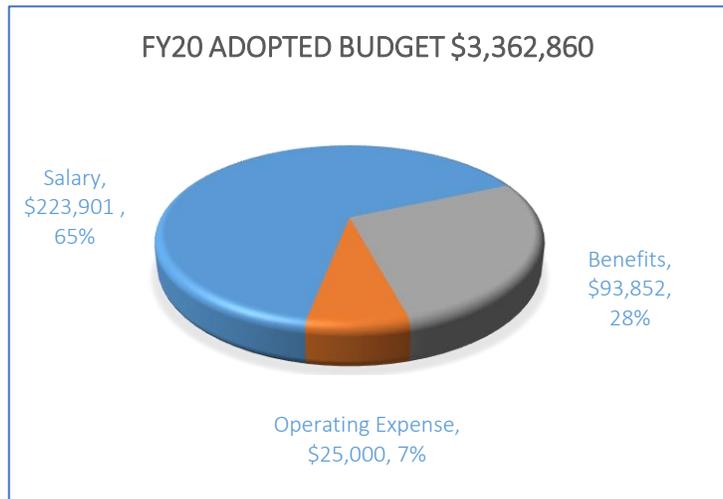
The purpose of the Electrical Inspections activity is to administer the City’s electrical codes and inspect electrical installations for residential, commercial, industrial, solar and all renewable energy so that projects comply with applicable codes, laws and ordinances.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Electrical Inspections activity of T&D is \$0.34 million for personnel.

This budget includes funding for 2.25 positions.

FY20 Personnel	
T&D Superintendent	.25
Revenue Protection/Electric Inspector	<u>2.00</u>
Total	2.25



Service Efforts and Accomplishments

The inspectors recorded 3,032 hours in the field in Calendar Year 2019.

Electric Inspections		
Work Order Type	Hours	%
Customer Owned Installations	3,032	100%

Utility Maintenance

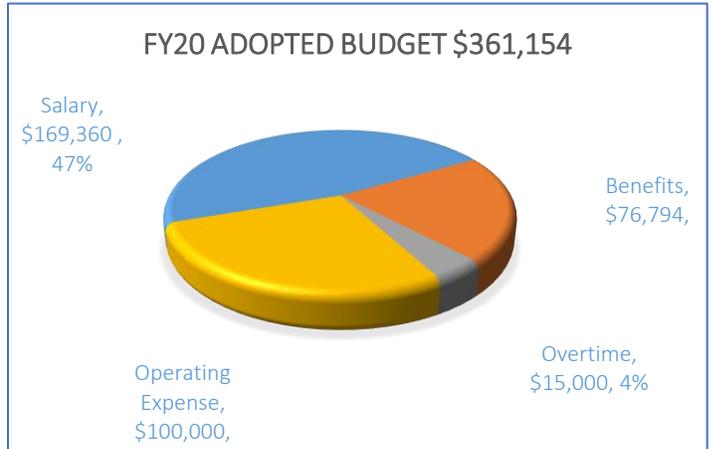
The purpose of the Utility Maintenance activity is to maintain IPL plants and grounds, including buildings and grounds repair, janitorial services and minor vehicle maintenance so that the work environment for providing electric service is available and safe for all employees and visitors.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Utility Maintenance activity of T&D is \$0.26 million for personnel.

This budget includes funding for 2.1 positions.

FY20 Personnel	
T&D Superintendent	0.1
Utility Maintenance Lead Worker	1.0
Utility Maintenance Worker	<u>1.0</u>
Total	2.1



Service Efforts and Accomplishments

The maintenance staff recorded 3,230 hours in the field in Calendar Year 2019.

Utility Maintenance			
Work Order Type	Hours	%	
Substation Maintenance	3,230	100%	

System Operations

The System Operations Division of Independence Power and Light (IPL) consists of activities that manage and coordinate the transmission and distribution of power locally and regionally so that safe and reliable electric service is maintained for IPL customers.

The following activities comprise System Operations:

- System Operators
- Supervisory Control and Data Acquisition/Energy Management System
- Trouble Dispatch
- Energy Markets

Budget and Personnel Highlights

The FY20 Budget and Personnel by Activity table lists four distinct efforts by the Division to maintain safe and reliable electric service. Each of these Activities is discussed in further detail following. The Expenditures table below provides the three most recent adopted budgets, two years of actual expenditures and the current revised budget for Fiscal Year 2019-20.

- There are two significant changes from the FY19 Adopted Budget to the FY20 Adopted Budget:

- The Salary line increased because the Dispatchers were moved into the System Operations budget from Transportation and Distribution; and
- The Benefits line decreased because the Adopted Budget did not include \$257,826 for pension and insurance benefits. This mistake in the budgeting process is the reason why the FY20 Budget and Personnel by Activity table does not agree with the System Operations table at the bottom of the page.

Activity	Budget	FTEs
System Operator	\$1,576,786	8.1
SCADA/EMS	\$1,177,546	5.7
Trouble Dispatch	\$810,808	5.6
Energy Markets	\$347,078	1.1
Total	\$3,912,218	20.5

- The majority of Operating Expenses for the Division are technology related, including software support and maintenance.
- Professional Services includes funding for SCADA/EMS software engineering services and vulnerability assessments.
- The Equipment funding includes substation network upgrades and SCADA/EMS server replacement

Expenditure Type	FY 2017-18		FY 2018-19		FY 2019-20	
	Adopted Budget	FY 2017-18 Actual	Adopted Budget	FY 2018-19 Actual	Adopted Budget	FY 2019-20 Adjusted Budget
Salary	\$ 1,959,292	\$ 1,869,328	\$ 1,990,493	\$ 1,729,481	\$ 2,301,963	2,301,963
Benefits	535,664	497,288	504,005	486,015	477,948	477,948
Overtime	179,348	145,269	192,271	126,291	192,271	192,271
Sub-Total Personnel	\$ 2,674,304	\$ 2,511,885	\$ 2,686,769	\$ 2,341,786	\$ 2,972,182	\$ 2,972,182
Operating Costs	564,845	442,470	551,070	343,823	466,610	518,498
Professional Services	267,000	19,113	415,297	45,068	110,000	384,256
Equipment	115,500	210,471	110,000	14,415	105,600	123,021
Total Expenditures	\$ 3,621,649	\$ 3,183,939	\$ 3,763,136	\$ 2,745,091	\$ 3,654,392	\$ 3,997,957

System Operator

The purpose of the System Operator is to monitor and control high voltage electrical systems within acceptable operating ranges and in compliance with NERC Reliability Standards and Southwest Power Pool (SPP) Criteria, Protocols and Data Specifications in order to prevent large and cascading system outages.

NERC Reliability Standards govern System Operator qualifications and responses to operational situations. Skilled personnel certified as NERC System Operators, per NERC requirements, trained on the operating tools and procedures available so that they may address emerging conditions before they cause large power outages.

Utilizing the SCADA/EMS network to monitor/control system equipment at 34 high voltage substations, switching and generating stations, the Operator

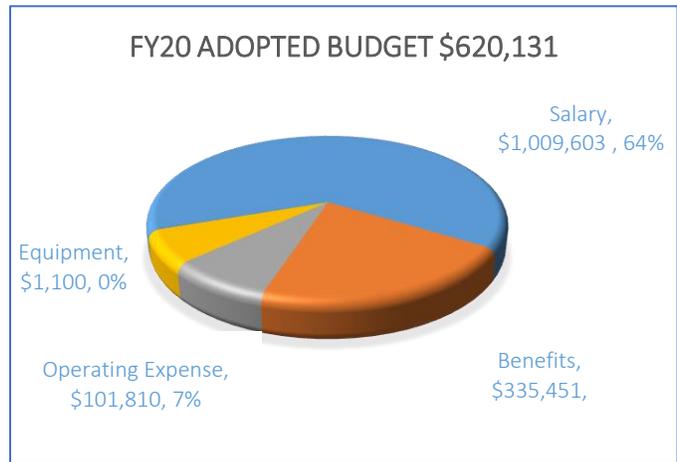
- conducts real-time contingency analysis as stipulated by NERC Standards;
- operates and administers the various SPP operating reliability functions;
- accounts for the hourly flow of electrical energy between neighboring utilities and from generating resources;
- submits Transmission and Generation outage reports to the SPP Reliability Coordinator and SPP Balancing Authority

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the System Operator activity is \$1.58 million for personnel and operating costs.

This budget includes funding for 8.1 positions.

FY20 Personnel	
System Operations Manager	0.5
P&L Operations Supervisor	0.6
Electric System Operating Engineer	1.0
Senior System Operator	5.0
System Operator	1.0
Total	8.1



Service Efforts and Accomplishments

During Calendar Year 2019 System Operations handled an average of 98.6 calls per day and processed 17.1 SCADA alarms per hour.

System Operator Metrics	
<i>Calls Initiated/Received</i>	36,000
<i>Entries in System Operator Log</i>	6,300
<i>SCADA Alarms Processed</i>	150,000
<i>Responded - SPP Dispatch Instructions</i>	2,500
<i>NERC CEH Training hours</i>	900

Supervisory Control and Data Acquisition/Energy Management System

The purpose of the SCADA/EMS activity is to administer a 24/7/365 System compliant with North American Electric Reliability Corporation (NERC) Reliability Standards and Southwest Power Pool (SPP) Protocols and Data Specifications that collects and transmits real-time data from substations, generators, solar and wind farms so that the system operations control centers can monitor and control the IPL electrical system 99.9943% of the time.

The SCADA/EMS includes 12 data networks, 24 servers, 16 workstations and over 50 network devices situated across two control centers. Administration tasks include but are not limited to

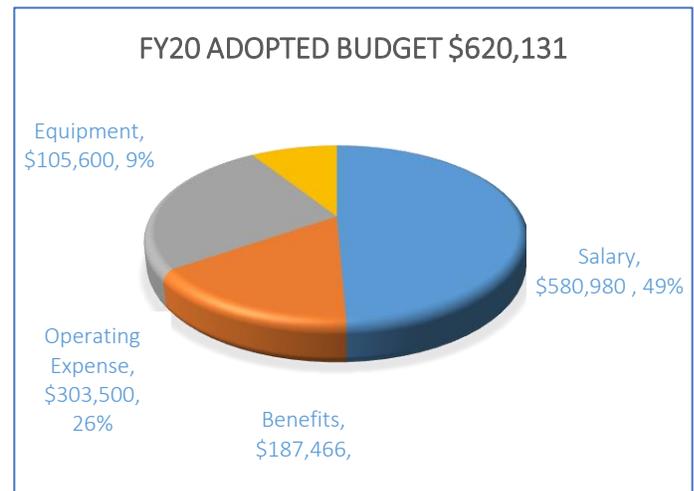
- developing computer system infrastructures that have built in security and redundancy, having backup and recovery plans and testing the plans;
- programming the SCADA/EMS Human Machine Interface (HMI) displays for the System Operator;
- programming the data exchange systems for regional electrical grid reliability and the energy markets;
- archiving data for future engineering projects;
- installing security/bug patches and monitoring for security vulnerabilities; and
- compliance reporting for 29 NERC, SPP and TOP requirements.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the SCADA/EMS activity is \$1.18 million for personnel and operating costs.

This budget includes funding for 5.7 positions.

FY20 Personnel	
System Operations Manager	0.2
SCADA/EMS Supervisor	1.0
EMS Coordinator I	1.0
EMS Coordinator II	1.0
Cyber Security Coordinator II	1.0
Network System Specialist	1.5
Total	5.7



Service Efforts and Accomplishments

During Calendar Year 2019, SCADA/EMS staff were able to achieve 100% system availability

SCADA/EMS Metrics	
SCADA Points in Scan	58,000
Real-time Data Point Exchange w/SPP (5-10sec)	11,200
Change Tickets/Patches/ Malware/Antivirus - Applied	2,200
SCADA/EMS Asset Downtime	0
SCADA/EMS Failovers	24
SCADA/EMS Maintenance/Data Modifications	3.300
Alerts/Incidents/Notifications Addressed	1,088,000

Trouble Dispatch

The purpose of the Trouble Dispatch activity is to coordinate IPL response to electrical outages and trouble calls so that the frequency and length of system outages kept to a minimum for IPL customers. As measured by industry standards, IPL earned recognition in 2018 by the American Public Power Association (APPA) for achieving exceptional electric reliability. IPL had a system average interruption duration index of 43.992 minutes compared to the APPA average of 202.449 minutes. The Association determined that electric service was available 99.992% of the time.

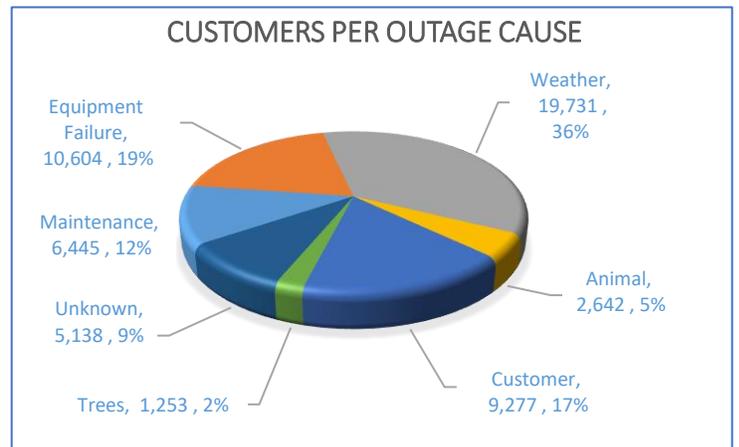
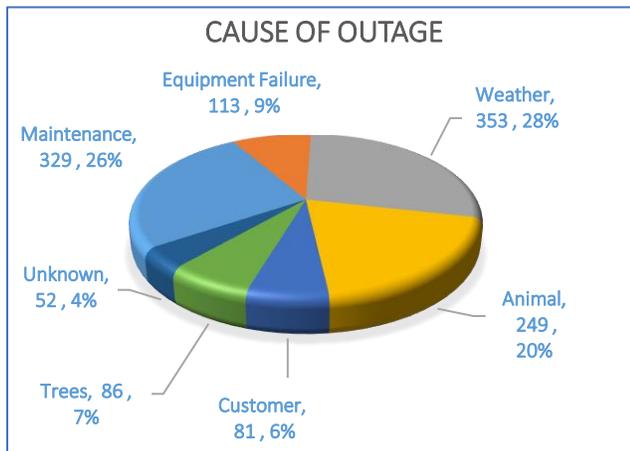
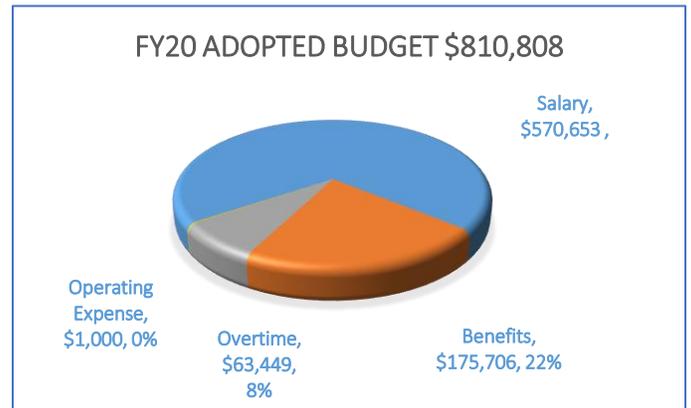
This outcome is achieved by

- monitoring the Outage Management System and dispatching crews;
- managing customer service requests for electric services, streetlight and stoplight issues; and,
- coordinating staff outage restoration efforts.

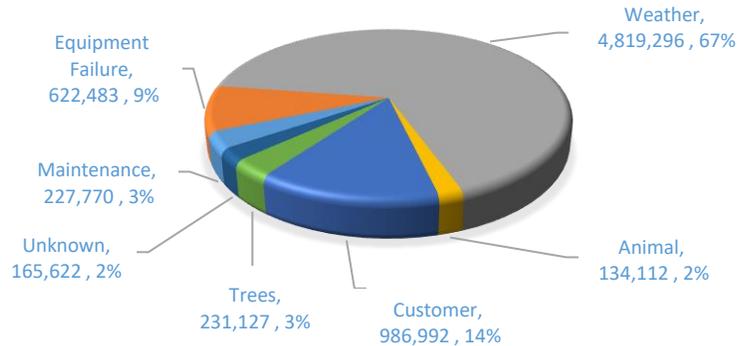
Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Trouble Dispatch activity is \$0.75 million for personnel and operating costs. This budget includes funding for 5.6 positions.

FY20 Personnel	
System Operations Manager	0.3
P&L Operations Supervisor	0.3
Dispatcher	5.0
Total	5.6



CUSTOMER MINUTES PER OUTAGE CAUSE



Cause of Outage	Outages	Customers Affected	Customer Minutes	Customers per Outage	Customer Minutes per Outage	Minutes per Outage
110 Maintenance	253	5,650	186,240	22.3	736.1	33.0
120 Equipment Replacement	63	440	28,373	7.0	450.4	64.5
130 Line Repairs	6	22	541	3.7	90.2	24.6
140 Tree Trimming	5	107	6,337	21.4	1267.4	59.2
190 Other planned	2	226	6,279	113.0	3139.5	27.8
300 Material or equipment fault/failure	102	10,500	610,252	102.9	5982.9	58.1
310 Installation fault	2	9	446	4.5	223.0	49.6
360 Other equipment installation/design	1	1	22	1.0	22.0	22.0
400 Decay/age of material/equipment	6	85	11,409	14.2	1901.5	134.2
410 Corrosion/abrasion of material/equipment	2	9	354	4.5	177.0	39.3
500 Lightning	81	1,434	176,990	17.7	2185.1	123.4
510 Wind, not trees	164	11,006	2,550,661	67.1	15552.8	231.8
520 Ice, sleet, frost, not trees	34	1,605	727,211	47.2	21388.6	453.1
540 Rain	4	59	13,894	14.8	3473.5	235.5
590 Weather, other	70	5,627	1,350,540	80.4	19293.4	240.0
610 Bird	20	160	9,312	8.0	465.6	58.2
630 Squirrel	220	2,421	120,394	11.0	547.2	49.7
690 Animal, other	9	61	4,406	6.8	489.6	72.2
700 Customer-caused	22	22	4,134	1.0	187.9	187.9
710 Motor vehicle	35	9,016	956,009	257.6	27314.5	106.0
740 Customer cuts tree	9	86	10,346	9.6	1149.6	120.3
750 Vandalism	1	1	25	1.0	25.0	25.0
760 Caused by construction or maintenance/dig-in	2	48	4,086	24.0	2043.0	85.1
770 Contractor cuts tree	3	26	2,007	8.7	669.0	77.2
790 Public, other	9	78	10,385	8.7	1153.9	133.1
810 Tree growth*	76	1,206	221,018	15.9	2908.1	183.3
840 Tree overhang or dead tree without weather	10	47	10,109	4.7	1010.9	215.1
999 Cause unknown	52	5,138	165,622	98.8	3185.0	32.2
Grand Total	1,263	55,090	7,187,402	43.6	5690.7	130.5

Energy Markets

The purpose of the Energy Market activity is to coordinate the operation of the Power Purchase Agreements, IPL generators and demand bids so that IPL maximizes the value received for its' generating assets and meets Southwest Power Pool market obligations.

To accomplish this, staff

- Assess asset performance, identify operational issues and opportunities for improvement;
- Oversee market strategy and monitor market operations;
- Build and maintain knowledge of general Southwest Power Pool (SPP) Marketplace protocols, track market protocol change requests, determine impact on Department operations and provide feedback on requests; and,
- Advocate for IPL's interests at various SPP meetings and in organizational groups, including Market Working Group, Change Working Group, and Supply Adequacy Working Group.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Energy Markets activity is \$0.35 million for personnel and operating expenses. This budget includes funding for 1.2 positions.

FY20 Personnel	
System Operations Manager	0.1
P&L Operations Supervisor	0.1
Energy Markets Coordinator	1.0
Total	1.2

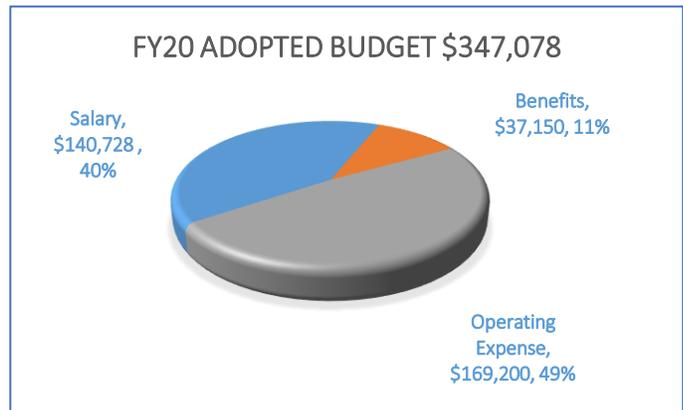
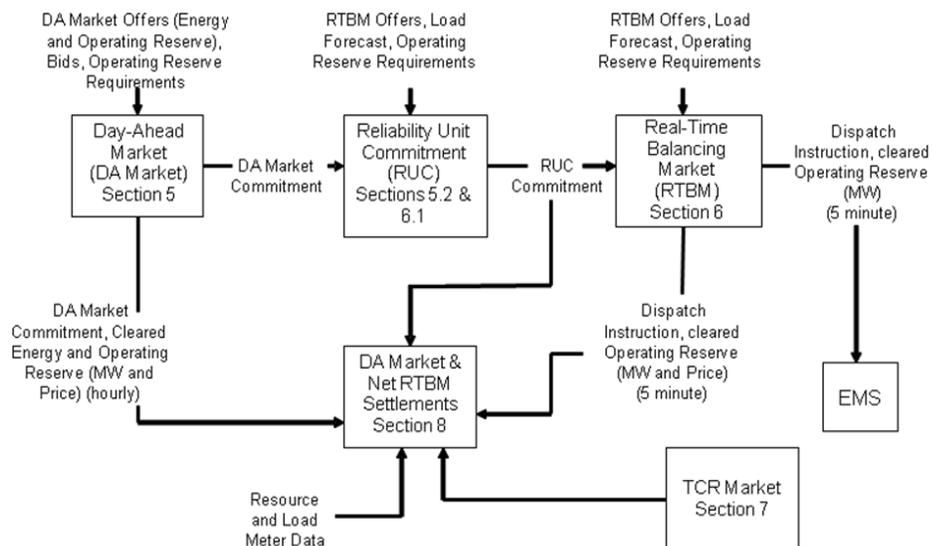


Figure 1 Integrated Marketplace



Power Production Operations and Maintenance

The purpose of the Power Production Division of Independence Power and Light is to operate and maintain the electric generation assets for the department so that IPL is ready and able to meet the needs and requirements of the Southwest Power Pool. This mission is accomplished by:

Unit	Age (years)	Resource Fuel	Nominal Capacity (MW)	Accredited Capacity (MW)
Blue Valley 1	60	Natural Gas	22	22
Blue Valley 2	60	Natural Gas	22	22
Blue Valley 3	53	Natural Gas	54	54
Sub J-1	49	Fuel Oil	13	13
Sub J-2	49	Fuel Oil	12	12
Sub I-3	46	Fuel Oil	17	17
Sub I-4	46	Fuel Oil	16	16
Sub H-5	46	Natural Gas / Fuel Oil	17	17
Sub H-6	44	Natural Gas / Fuel Oil	18	18
Total			191MW	191MW

From IPL Energy Master Plan Table 4-1

- operating and monitoring all power generation equipment
- operating medium voltage breakers and conducting station battery testing;
- maintaining the steam and combustion turbines; and,
- conducting repairs and preventative maintenance on the electrical components and instrument unit controls for the steam and combustion turbine generators.

Budget and Personnel Highlights

The FY20 Budget and Personnel by Activity table lists the three activities. Each of these activities is discussed in further detail following the graphic representations. The Expenditures table below provides the two most recent adopted budgets, one year of actual expenditures and the current revised budget for Fiscal Year 2019-20. (Separate division was established in FY19)

FY20 Budget and Personnel by Activity		
Activity	Budget	FTEs
Administration	\$620,131	3.0
Mechanical Maintenance	\$2,847,427	17.0
Power Production Operations	\$5,529,150	20.0
Total	\$8,996,708	40.0

Power Production Operations and Maintenance Expenditures

Expenditure Type	FY 2017-18		FY 2018-19		FY 2019-20	FY 2019-20
	Adopted Budget	FY 2017-18 Actual	Adopted Budget	FY 2018-19 Actual	Adopted Budget	Adjusted Budget
Salary	\$ 6,109,681	\$5,541,495	\$ 5,942,941	\$ 4,686,636	\$4,574,806	\$4,199,863
Benefits	\$ 1,956,834	\$ 1,565,400	\$ 1,587,792	\$ 1,430,057	\$ 1,624,080	\$1,514,640
Overtime	\$ 808,057	\$ 426,413	\$ 634,922	\$ 491,565	\$ 634,922	\$634,922
Sub-Total Personnel	\$ 8,874,572	\$7,533,307	\$ 8,165,655	\$6,608,257	\$6,833,808	\$6,349,425
Operating Costs	\$ 3,544,350	\$ 1,674,752	\$ 2,462,850	\$ 1,098,276	\$ 1,911,900	\$ 1,995,751
Professional Services	\$ 433,125	\$ 324,160	\$ 384,000	\$ 193,814	\$ 245,000	\$ 248,836
Equipment	\$ 16,000	\$ 3,757	\$ 11,000	\$ 239	\$ 6,000	\$ 6,000
Total Expenditures	\$12,868,047	\$9,535,976	\$11,023,505	\$7,900,586	\$8,996,708	\$8,600,012

- **Operating Costs and Professional Services**
 - Building Maintenance Services \$63,695
 - Building Repairs \$185,715
 - Chemicals \$87,890
 - Diesel Fuel \$37,651
 - Engineering Analyses \$145,408
 - Generation Unit Repairs and Maintenance \$197,913
 - Operating Supplies \$40,114
 - Software/Tech Support \$182,234
 - Fire Suppression Services \$42,233
 - Generation Unit Inspections and Tests \$64,305
 - Generation Unit Parts and Supplies \$133,399
 - Utilities \$45,153

Administration

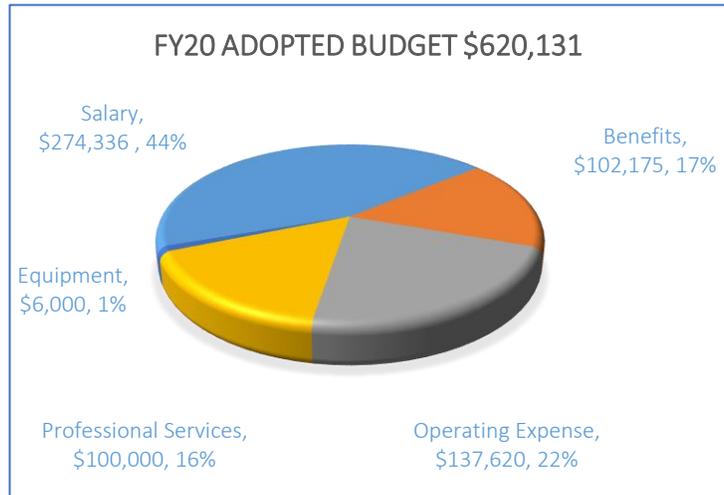
The purpose of Administration is to administer and manage power generation at the Blue Valley Power Plant and Combustion Turbines so that IPL meets and/or exceeds Southwest Power Pool requirements.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for Administration is \$0.62 million for personnel, operating costs and equipment.

This budget includes funding for 3.0 positions.

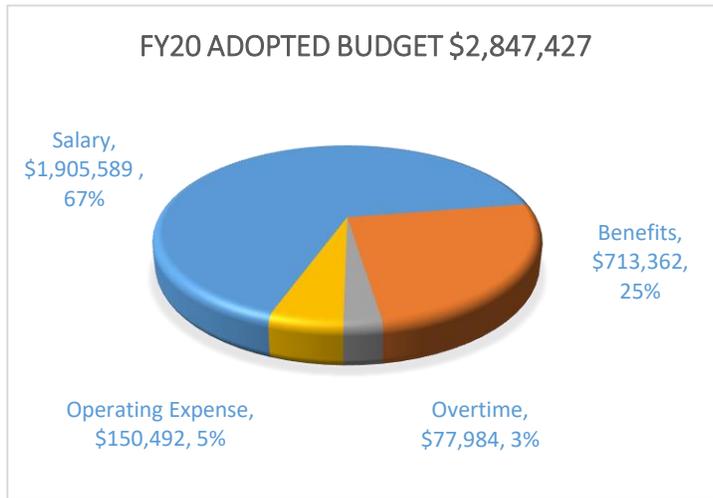
FY20 Personnel	
Power Production Manager	1.0
Division Administrative Specialist	1.0
Utility Data Specialist	<u>1.0</u>
Total	3.0



Administration FERC Code Allocation	Hours
Operations Supervision and Engineering Power Generation	797
Maintenance Supervision and Engineering Power Production	798
Miscellaneous Steam Power Expenses	3,138
Non-Productive Time (Union Business, Funeral Leave, Meetings)	295

Power Production Mechanical Maintenance

The purpose of Mechanical Maintenance is to maintain the steam and combustion turbines and associated equipment so that electricity can be generated and distributed when called upon by the Southwest Power Pool.



Budget and Personnel

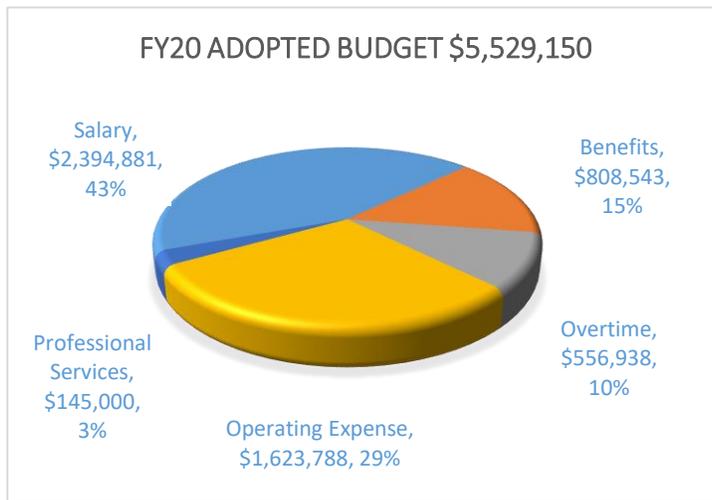
The Fiscal Year 2019-20 Adopted Budget for the Mechanical Maintenance activity is \$2.85 million for personnel and operating costs. This budget includes funding for 17.0 positions.

FY20 Personnel	
Plant Maintenance Superintendent	1.0
Facility Maintenance Supervisor	1.0
Machinist/Mechanic	1.0
Instrument/Pneumatic Technician	5.0
Journeyman Plant Electrician	3.0
Journeyman Plant Mechanic	5.0
Journeyman Mechanic Welder	<u>1.0</u>
Total	17.0

Mechanical Maintenance	CY19 Hours	% of Total	% of Site
Operations Supervision and Engineering – Blue Valley Plant	1,314	4.6%	10.3%
Maintenance Supervision and Engineering – Blue Valley Plant	700	2.5%	5.5%
Maintenance of Blue Valley Plant	10,693	37.8%	84.2%
	12,707	44.9%	100%
Operations Supervision and Engineering – Substation CTs	1,156	4.1%	10.3%
Maintenance Supervision and Engineering – Substation CTs	617	2.2%	5.5%
Maintenance of Substation CTs	9,410	33.2%	84.2%
	11,183	39.5%	100%
Non-Productive Time (Paid Leave, City Business, Rest Periods)	4,433	15.7%	
TOTAL	28,323		

Power Production Operations

The purpose of the Power Production Operations activity is to operate and monitor all power generation equipment needed so that IPL is able to produce electric power when called upon by the Southwest Power Pool.



Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Power Production Operations activity is \$5.53 million for personnel, operating costs and professional services. This budget includes funding for 20.0 positions.

FY20 Personnel	
Production Operations Superintendent	1.0
Engineer III	1.0
Power Plant Operator I	3.0
Power Plant Operator II	5.0
Power Plant Operator III	5.0
Operations Shift Supervisor	4.0
Lab Control Technician	1.0
Total	20.0

Power Production Operations	CY19 Hours	%
Operations Supervision and Engineering - Power Generation	7,135	19.0%
Maintenance Supervision and Engineering - Power Production	820	2.2%
Steam Expenses	9,247	24.6%
Electric Expenses	9,314	24.8%
Miscellaneous Steam Power Expenses	3,219	8.6%
Non-Productive Time (Paid Leave, City Business, Rest Periods)	7,834	20.8%
TOTAL	37,569	

Energy Generated by IPL

On-System Owned Resources	CY19 Production - MW	% of IPL Generated	% of Total Power Delivered
Blue Valley 1	0	0	0
Blue Valley 2	0	0	0
Blue Valley 3	20,803	64.4%	1.75%
Sub J-1	563	1.7%	0.05%
Sub J-2	307	1.0%	0.03%
Sub I-3	685	2.1%	0.06%
Sub I-4	562	1.7%	0.05%
Sub H-5	4,957	15.4%	0.42%
Sub H-6	4,406	13.6%	0.37%
Total	32,283		2.71%

Purchased Power

Resource	Expenses \$000	Megawatt- Hours	Cost per MWh	% of Total
Southwest Power Pool	\$3,400	101,145	\$33.62	8.0%
Off-System Owned Resource				
Dogwood	\$10,761	296,423	\$36.30	23.5%
Power Purchase Agreements				
Iatan 2	\$17,743	327,745	\$54.14	26.0%
Nebraska City 2	\$16,298	400,509	\$40.69	31.8%
Solar Farms	\$1,605	19,693	\$81.50	1.6%
Marshall Wind Farm	\$2,649	78,723	\$33.66	6.2%
Smoky Hills Wind Farm	\$2,427	36,537	\$66.43	2.9%
Total	\$54,883	1,260,775	\$43.52	

Southwest Power Pool

The Department participates in the Integrated Market operated by the SPP. This Day-Ahead market includes transmission congestion rights, a reliability unit commitment process and real-time balancing market with the purpose to maximize cost-effectiveness, provide market participants with greater access to reserve energy, and improve regional balancing of electricity supply and demand. In fiscal year 2019, the Department purchased 101,145 megawatt-hours in the Integrated Market for a total cost of \$3,400,000. The Department also sold 186,957 megawatt-hours of energy for approximately \$5,700,000.

Dogwood

The Department owns a 12.3% undivided interest (approximately 75 MW) in the Dogwood Energy Facility, a nominal 610 megawatt natural gas-fired combined cycle generating plant located in Pleasant Hill, Missouri. The ownership agreement specifies that each of the owners are responsible for their respective share of the fixed operation and maintenance costs, the variable operating costs including fuel, debt service and renewals and replacements of the facility. The owners also share in any revenues from sales of unused capacity and energy in the facility. Dogwood generated 296,423MWh of electricity

for IPL in Calendar Year 2019. The cost per MWh was \$36.30.

Iatan 2

The Department purchases 53 MW of capacity and energy on a cost-based approach from the Missouri Joint Electric Utility Commission (MJMEUC) ownership interest in Kansas City Power & Light's (now Evergy) Iatan 2 generating unit. MJMEUC agrees to supply and deliver to IPL 50% of the capacity and energy available from its undivided ownership share of Iatan.

Purpose	CY19 Expenses
Administration	\$431,087
Operations & Maintenance	\$2,678,689
Fuel	\$4,793,632
Capital Budget	\$548,312
Debt Service	\$9,290,907
Total	\$17,742,627

Iatan 2 generated 327,745MWh of electricity for IPL in Calendar Year 2019. The cost per MWh was \$54.14.

Nebraska City 2

The Department has a participation power agreement with Omaha Public Power District (OPPD) whereby it purchased an 8.33% share (approximately 57 megawatts) of a 682 megawatt coal-fired baseload generating unit at Nebraska City, Nebraska. The agreement provides that OPPD is the owner/operator of the unit and OPPD

Purpose	CY19 Expenses
Transmission	\$962,976
Operations & Maintenance	\$3,352,684
Fuel	\$6,429,260
Capital Budget	\$899,640
Debt Service	\$4,534,085
Other	\$119,023
Total	\$16,297,668

sells the Department's share of the output on an actual cost-based approach. OPPD issued tax-exempt bonds to pay for the construction of the unit and the Department is obligated to pay its appropriate share of the debt service on the bonds, the fixed operation and maintenance costs, the variable operating costs including fuel, and renewals and replacements of the unit.

Nebraska City 2 generated 400,509MWh of electricity for IPL in Calendar Year 2019. The cost per MWh was \$40.69.

Solar Farms

The Department has executed a certain renewable energy purchase agreement with MCP-Independence, LLC. This agreement is for the energy produced from a 3 MW solar farm located on the Department's Distribution system. In July 2017, the city executed a second renewable energy purchase agreement with MCP-Independence LLC to expand the solar farm by 8.5 MW. Both agreements provide that the City will purchase all energy output of the projects for the entire 25-year term of the agreements. The delivered cost of energy from these agreements totaled approximately \$1,500,000 for 18,913 megawatt-hours of delivered energy during fiscal year 2019.

Marshall Wind Farm

In May 2015, the Department executed a certain renewable energy purchase agreement with Marshall Wind Energy LLC. The Marshall Wind agreement is for a 20 MW purchase from a wind generation project located in north central Kansas – Marshall Wind Farm. The delivered cost of this energy in CY19 totaled \$2,649,427 for 78,723MWh, or \$33.66 per MWh.

Smoky Hills Wind Farm

A renewable energy purchase agreement with Smoky Hills Wind Project II, LLC provides for 15 MW of energy from a wind generation project located in central Kansas - the Smoky Hills Wind Farm. Smoky Hills generated

Purpose	FY19 Expenses
Contractual Obligation	\$1,644,165
Curtailement	\$783,074
Total	\$2,427,239

36,537MWh of electricity for IPL in Calendar Year 2019. The cost per MWh was \$66.43.

Environmental Health and Safety

The purpose of the Environmental Health and Safety (EHS) Division of Independence Power and Light is to comply with federal, state and local environmental, occupational health and safety laws, so that there is a minimal environmental impact of producing, transmitting and distributing electricity and workplace accidents and injuries are prevented. These goals will be accomplished by

- Hazardous materials management and emergency response;
- Regulatory compliance reporting to the federal Environmental Protection Agency and to the Missouri Division of Natural Resources;
- Safety Training for IPL employees that conforms with the Occupational Safety and Health Administration (OSHA) for the electric utility industry; and,
- Accident and injury management.

Budget and Personnel Highlights

The FY20 Budget and Personnel by Activity table lists the two EHS activities. Each of these Activities is discussed in further detail following the graphic representations.

FY20 Budget and Personnel by Activity		
Activity	Budget	FTEs
Environmental Health	\$728,416	1.7
Safety Management	\$406,757	1.3
Total	\$1,135,173	3.0

The Expenditures table below provides the two most recent adopted budgets, one year of actual expenditures and the current revised budget for Fiscal Year 2019-20. (Separate division was established in FY19)

- Operating Costs include
 - Fees and Permits \$161,250
 - Flame Resistant and ARC Flash Clothing \$115,000
 - Safety Supplies \$34,100
 - Specialized Training \$24,500
- Professional Services includes
 - 3rd Party Testing and Analysis \$237,400
 - Electric Safety Plan \$25,000
 - Permitting and Consulting support \$20,000

Environmental Health and Safety Expenditures				
Expenditure Type	FY 2018-19 Adopted Budget	FY 2018-19 Actual	FY 2019-20 Adopted Budget	FY 2019-20 Adjusted Budget
Salary	\$ 403,208	\$ 242,394	\$ 345,861	345,861
Benefits	129,228	65,506	125,377	125,377
Overtime	0	0	0	0
Sub-Total Personnel	\$ 532,436	\$ 307,901	\$ 471,238	\$ 471,238
Operating Costs	409,950	145,955	509,050	374,535
Professional Services	264,900	57,311	282,400	282,400
Equipment	7,000	0	7,000	7,000
Total Expenditures	\$ 1,214,286	\$ 511,168	\$ 1,269,688	\$ 1,135,173

Environmental Compliance

The purpose of Environmental Compliance is to reduce environmental impact by monitoring IPL assets and reporting results so that environmentally-friendly electric service is provided to the consumers in compliance with federal and state environmental laws. Compliance efforts involve air, water, wastewater, stormwater, solid waste, hazardous waste, oil and chemical storage, PCB management, coal combustion residuals management and hazard communication.

The primary laws that drive compliance work include

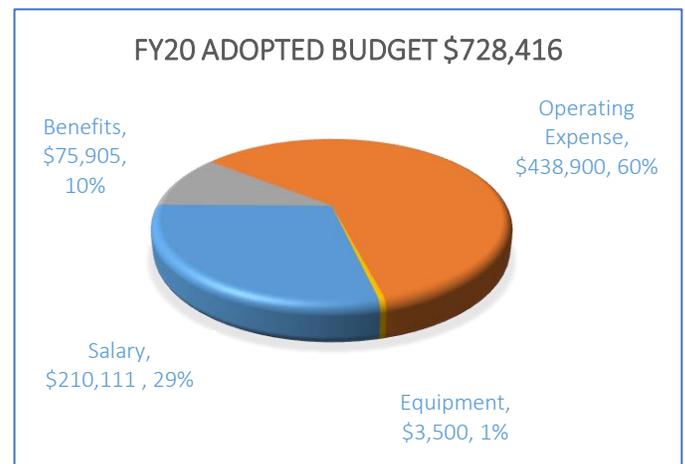
- Clean Air Act
- Clean Water Act
- Resource Conservation and Recovery Act
- Safe Drinking Water Act
- Toxic Substances Control Act
- Emergency Planning and Community Right-to-Know Act

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Environmental Health activity is \$0.73 million for personnel and operating costs.

This budget includes funding for 1.7 positions.

FY20 Personnel	
Environmental Health & Safety Manager	0.8
Environmental Program Specialist III	0.9
Total	1.7



Service Efforts and Accomplishments

During Calendar Year 2019 Environmental Compliance staff generated 287 compliance reports.

Environmental Compliance Metrics	
Hazardous Chemical container inspections	56
MDNR/EPA Annual Environmental Inspections	7
Number of MDNR/EPA violations	0

Safety Management

The purpose of the Safety Management Division is to provide employee training and safety equipment compliant with utility industry standards and OSHA policies so that accidents and injuries to IPL workers on the job are few and far between. This purpose is met through these tasks:

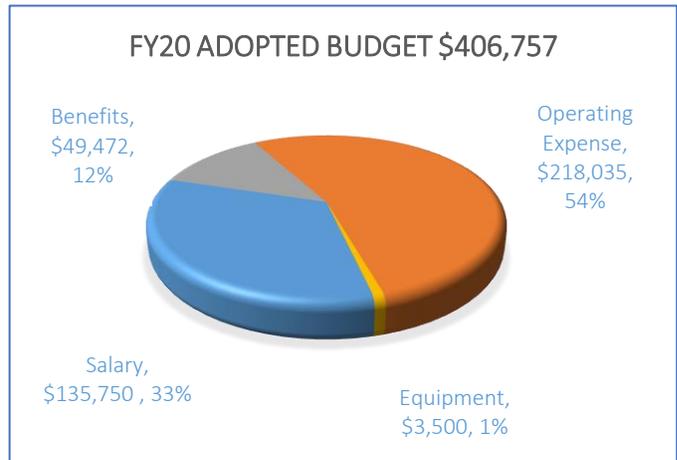
- provide employee training governed by the APPA Safety Manual, which conforms with OSHA policies;
- conduct inspections and audits to identify environmental or safety deficiencies;
- manage and investigate accident/injury incidents.

Budget and Personnel

The Fiscal Year 2019-20 Adopted Budget for the Safety Management activity is \$0.41 million for personnel and operating costs.

This budget includes funding for 1.3 positions.

FY20 Personnel	
Environmental Health & Safety Manager	0.2
Environmental Program Specialist III	0.1
Safety & Training Specialist	<u>1.0</u>
Total	1.3



Service Efforts and Accomplishments

During Calendar Year 2019 Safety Management staff conducted 398 safety events, including training, accident investigation, policy generation and regular inspections.

Safety Management Metrics	
Training sessions	60
IPL incident Rate (2018)	5.4
Annual Safety Reports	390

Independence Power & Light
Performance Audit
Findings &
Recommendations

Finding 1: The timekeeping and payroll practices within the Transmission and Distribution division lack adequate accountability and create the opportunity for malfeasance.

The T&D division is comprised of four sections, each led by a Superintendent: Overhead, Underground, Substations and Trees. This audit looked in depth at Overhead and Underground timekeeping and payroll practices, which comprise the majority of Linemen. Overhead and Underground are organized around 8 Crewleaders who have crews ranging from 0 to 3 Journeymen Linemen and/or Apprentice Linemen reporting to them. This 21 member staff maintains the electric transmission and distribution system. They are assisted by one Crewleader and 4 Journeymen Linemen who provide support services as well as 4 Troublemens, who serve as the first line of response. (see the T&D portion of the Budget and Metrics section for further detail).

The Overhead and Underground Superintendents are responsible for daily work assignments. The Crewleaders execute the assignments, maintain a timesheet and submit the timesheet to the Superintendent, who works with Utility Support Clerk to enter time into the timekeeping system. The Superintendent signs off on the timesheet record.

Analysis of timesheets, work orders and payroll record yielded the following observations:

- It is common for timesheets to be altered and it is impossible to determine who made the changes and if changes were made before or after the Superintendent signed the timesheet. The payroll record does not always match the timesheet.
- About one third of time worked is Unaccounted For with no record of location or asset:
 - 5,123 hours, or 10.3%, of straight time was recorded with No Work Order Issued. This roughly the equivalent of 3 man years of unaccounted time;
 - 11,643 hours, 23.5%, of straight time was recorded under a blanket work order, which indicates only that a crew member was assigned to the meter shop, general service or maintenance.
 - Over 10% of overtime was paid as Unaccounted For time
- It is common for work order records to reflect less time on a job than the payroll record; i.e., where a work order says it took 5 hours to change out a pole, the payroll record shows 8 hours that were paid;
- It is common for work to be scheduled in the early morning hours, ostensibly is to do work at the least disruptive time of day. However, a job that starts at, say, 4 am will pay 3 hours at overtime rates, or 150% of the cost of doing the work during the day. Additionally, the crew is paid for a meal hour and gets a meal allowance. Then, because of the work rules, the crew is entitled to 4 hours of Rest Period, which they take that day along with personal leave, including sick leave.

- The bottom line is that this practice of avoiding a two hour shut off period for a customer ends up in higher costs with the crew then off the rest of the day with full pay. Three hours of work ends up costing at least 8 hours.
- Inclement Weather: from January 1 – December 7, 2019 crews were paid for 3,933.5 hours of IW. A testing sample indicated that about half of those hours are recorded even though the weather report for the day doesn't meet the criteria. March 13, 2019 is one example:
 - Light rain reported between 2 am and 7 am, but no rain reported from 7 am to 4 pm.
 - One crew took 6 hours, another 5 hours, another 4, yet another 3 and one took 2 hours
 - 3 individuals took 8 hours
- In the Jan – Dec 2019 time period, crews were paid 6,485.5 hours time and half overtime and 1,455 hours of double time. Adjusting for storm recovery and mutual aid brings these totals to 4,278 hours of 1 ½ OT and 682 hours 2XOT. The total cost for this is approximately \$500,000
- One crew member has timesheets for 39 consecutive days (304 hours) that record his time as Light Duty but neither the time records or payroll reports list a worker's comp injury number. Furthermore, he was paid under the regular time code and not the light duty code.
- Sick leave is routinely used instead of vacation or personal business. One case in point, one whole crew was sick on February 6, 2019

Recommendation 1: The City Manager should expedite the implementation of the new Executime timekeeping system and require the use of time clocks for all T&D hourly workers.

Recommendation 2: The City Manager should immediately implement a manual time keeping system that places responsibility for each employee's time on that employee's shoulders. At a minimum, this system should include Daily records signed by hourly workers, including time in and time out and requests for leave made in writing

Recommendation 3: The City Manager should negotiate with IBEW Local 53 for the implementation of Federal Labor Standards Act overtime rules. This would, among other policies, authorize overtime after an employee works 40 hours in a week and does not include time off in the calculation of time worked.

Recommendation 4: The City Manager should suspend all work orders started on overtime (such as on Saturday) unless an emergency involving public health and safety exists. The IPL Director must approve the emergency conditions and inform the City Manager of this approval.

Recommendation 5: The City Manager should implement an Inclement Weather policy that protects worker safety, is applied uniformly and requires documentation of what the employees did with the paid down time.

Recommendation 6: The City Manager should immediately eliminate sick leave abuse, especially the practice of being paid for sick leave in order to fill out the time sheet after a Rest Period, Inclement Weather or any other excuse.

Recommendation 7: The City Manager should ensure that all work order, inventory, timekeeping, payroll and accounting systems are interfaced using common coding that meets all reporting requirements.

Recommendation 8: The City Manager should immediately require that every hour paid is recorded on a work order or a leave sheet. Not one paid hour should be unaccounted for time.

Recommendation 9: The City Manager should require full implementation of the full functionality of the CityWorks work order system and mandate training.

Recommendation 10: The City Manager should outfit every IPL vehicle with GPS location technology and internet connectivity technology to allow work orders and timekeeping functions in the field.

Finding 2: The Labor/Management relationship needs to be brought back into balance.

Transmission and Distribution Superintendents were unable to produce written policies for how IPL Management took responsibility for their respective rights, duties, and obligations concerning wages, work rules and other conditions of employment recorded as part of the work agreement with IBEW Local 53. When asked what documentation provided guidance, the work agreement and the on-the-job training they received when they left Local 53 and joined IPL Management were cited as references.

Recommendation 11: The City Manager should implement best practices for IPL Management. Written policies should be developed that document these practices and training provided to IPL Management on the administration of policies and procedures. These best practice policies should include but not be limited to, the following:

- Work assignments
- City Council calls for service
- Overtime
- Rest Periods
- Inclement Weather
- Personal Leave before/after Holiday

- Scheduled OT
- Storm Recovery
- Light Duty
- Standby
- Working on a holiday
- Mutual Aid

Finding 3: Numerous cost-saving opportunities exist within Transmission and Distribution operations

- A. The Troubleman function, if kept in its current operational role, would be more cost effective if it moved to three overlapping 8 hour shifts (something like from 5am-1:30pm and 10:30am-7pm and 3:30 pm-12am).
 1. The 5 early morning hours are mostly devoted to downed streetlight poles (25% of all time worked on the 5% premium shift is coded to Streetlights). One way to deal with the downed poles would be to have an overnight employee that preps the fleet go out and put up safety cones until a crew gets to it.
 2. Overtime earnings for Troublemens were over \$150,000 and mostly were paid when they were called in to cover a shift. They worked 6,400 hours of straight time, over 1,050 hours 1½xOT and 800 hours 2xOT. At \$48.64 per hour of straight time, the average earnings for Troublemens were \$77,824, for 1½xOT \$18,970 and 2xOT \$19,456. Total earnings (just for time worked, not paid leave) average \$116,250. That’s a premium of \$38,426, or 49.4%.
 3. The overlap periods would increase the true troubleshooting capacity during the day
- B. Outsource street light maintenance and private outdoor lighting.
 1. Two full time equivalent positions were allocated to these duties in CY19 at a cost of at least \$300,000.
 2. These functions are not part of the core IPL mission
- C. Outsource distribution poles capital improvements
 1. Nearly a third of the work orders – 13,000 hours – are “Change Out Pole-Distribution”
 2. 90% of these work orders (114) take less than 250 hours and account for about 5,730 hours
 - a. These work orders average about 50 hours – or 2 full days for a 3 man crew
 - b. A conservative cost estimate would be about \$400,000
 3. The other 13 work orders – those over 250 hours – account for the remaining 7,270 hours

- a. These average 559 hours
 - b. A conservative cost estimate would be about \$500,000
4. Bidding out these big jobs would be more cost effective
- D. Benchmarking with appropriate electric utilities should be undertaken in order to compare per position and per line mile costs.

Finding 4: Operation and maintenance of the CTUs will require less than the \$4.2 million and the 17 positions listed in the City Manager's Recommended Budget for FY 2021.

Analysis of Production payroll records for the mechanical maintenance staff revealed that a formulaic timekeeping methodology was used instead of recording actual time worked; maintenance of the Blue Valley Plant was 47.3% while maintenance of the CTUs was 42.4%. However, BV produced nearly twice as much energy using more complicated and interrelated systems. Logically, one could assume that maintenance time was also double, which would tilt the split to a 2/3 and 1/3 ratio. If the payroll methodology was accepted, then roughly half of current staff of 17 should remain – or about 8. However, the lower split would yield about 6.

Similar formulaic timekeeping methodology for Operations staff clouds the picture about the split between Blue Valley operations and the CTUs. Given the fact that SPP is controls when units will generate power and that the System Operations staff utilize the SCADA/EMS network to monitor/control system equipment at 34 high voltage substations, switching and generating stations, it appears that there is a level of redundancy. The substations do not run every day - in Calendar 2019, Sub J operated 7% of the days (25 days total), Sub I operated 8% (29 days), and Sub H 44% (161 days). Since they are primarily scheduled to operate the day before use and not called upon for immediate start very often, it is unclear why the operator redundancy would be necessary.

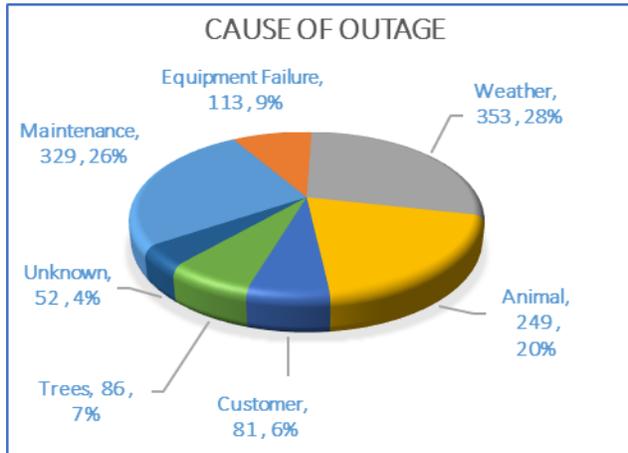
The City Manager's recommendation also includes \$300,000 for overtime and \$720,000 for maintenance. Hard to see justification here with the 17 positions in the budget.

Recommendation 12: The City Manager should provide additional justification for the Production division budget in the City Manager's Recommended Budget for FY 2021.

Finding 5: Equipment failures and decay cause 9% of electric outages

In calendar year 2019, equipment failures due to material defects, design flaws, installation errors, corrosion, abrasion and decay, accounted for 113 electric outages. These outages affected a total of 10,604 customers for a total of 622,483 minutes. The average outage due to

equipment failure affected 94 customers for 5,509 minutes, or just less than an hour per customer.



If animal caused outages were included – since protection of equipment from animals is used and available, then an additional 2,642 customers and 134,112 minutes could be added.

It should also be noted that the level of investment in tree/vegetation management provides proof of concept that being proactive enhances customer service and reduces the emergency dispatch of personnel, which is the highest cost of

service.

The City Manager’s Recommended Budget for FY2021 includes \$2,754,000 in the Warehouse budget (p. 141), under Inventory Purchases for “*Transformers, meters, poles, etc.”. This is the same amount as in the FY2020 Adopted Budget.

Expenditures from this line item in FY2018 were \$2,022,713 and in FY2019 were \$2,061,408.

FY2019 Inventory Purchases

Equipment Type	Description	Amount
Switchgear	200 Amp 3 Phase Dead Front Cur	\$35,200
Utility Poles	Wood Transmission & Distribution	\$161,578
Utility Poles	Metal, Mastarms and/or Hardware	\$121,534
Tools and Supplies	Miscellaneous	\$234,782
Wire	Copper/Aluminum Wire for FY 2019	\$188,288
Transformer	Pad and Pole Mount	\$518,404
Transformer	Pole Mount, Single & 3 Phase P	\$132,226
Transformer Hardware	Group 9, Current Transformers	\$25,892
Utility Hardware	Group 3 Arrestors, Group 4 Cutouts & Fuses, Group 6 UG Material	\$99,531
Utility Hardware	Miscellaneous Construction Products	\$110,019
Utility Hardware	Group 2, Group 6, Group 11	\$30,144
Utility Hardware	Groups 5 & 10	\$280,023
Utility Hardware	Group 1 Utility Hardware and Group 7 Meters	\$123,787
	Total	\$2,061,408

Recommendation 13: Independence Power and Light should investigate outages due to equipment failures to determine if the level of investment in new equipment is adequate and meets industry standards.

Recommendation 14: Independence Power and Light should benchmark outages with national data to determine best equipment practices for outage prevention.

Recommendation 15: The City Manager should provide a full inventory of IPL assets, including age and condition, and basis of value as reported in the FY2019 CAFR.

June 11, 2020

From: Jim Nail, Assistant General Manager, Power & Light Department

To: Mark Thoma-Perry, City Management Analyst

Subj: Independence Power & Light Performance Audit Findings and Recommendations

An audit of the Power & Light Department was conducted over the course of 2019 and 2020. The report of the audit, along with detailed findings and recommendations, were received by the Department on Friday, June 5, 2020. Appropriate department managers and supervisors were given the opportunity to review the report and comment on the findings and recommendations as detailed below within the seven days provided by City Code.

Finding 1, Bullet 1 – Time sheets for Transmission and Distribution (T&D) are completed by the crew leaders and forwarded to the T&D Superintendents. Time sheets are then entered into the payroll system by the division time keepers. The report for the payroll period is further reviewed by the department's Finance and Accounting staff and the Assistant General Manager. At any step, a correction might be made to ensure the accuracy of the payroll entries. Some of the questions are answered by phone, some by email. No changes are made outside of that chain, but there is not a consistent method of documenting those corrections. Going forward, reviewing personnel will maintain copies of emails or initial written copies with explanation of the corrections made.

Finding 1, Bullet 2 – All time is reported utilizing very detailed time sheets that meet the reporting requirements of the Federal Energy Regulatory Commission (FERC). FERC accounting requires that the time allocated to each work order be broken down into multiple categories. Due to this complexity, time sheets are completed separately for each work order a crew is assigned during a day and subdivided into the various tasks involved in the work. However, there are certain categories of time that do not get attributed to the work order, for example travel time, meals, meal allowance, Rest Period. These hours are not Unaccounted For, they are just excluded from work order accounting per FERC guidelines. Likewise, Blanket work orders are used for shop work, general service contacts with customers, short duration routine maintenance, or other tasks that do not support a specific work order. To separate each of these tasks into individual time sheets would be overly burdensome with no benefit.

Finding 1, Bullet 3 – Crews may be scheduled more than one work order per day, and each work order will have a separate time sheet for that portion of the day. The time not assigned to the work order (see bullet 2) must also be included. On some work orders reviewed, the actual time was not listed, only the estimated time prior to assigning the job

Finding 1, Bullet 4 – Work scheduled prior to the regular shift is only for commercial/business customers. This is a common industry practice to minimize the impact on local business operations or businesses that cannot take a power outage during business hours such as a

Dialysis Clinic or Plasma collection center. This scheduling is also used for work orders that impact traffic flow. The additional cost due to Meals, Meal Allowance and Rest Period is a function of the Work Agreement with IBEW and would have to be negotiated separately.

Finding 1, Bullet 5 – The Inclement Weather policy is also an element of the IBEW Work Agreement. It is recognized in the Agreement that implementation of the policy will not be uniform due to variations in weather patterns across the service territory as well as priority work that will be done regardless of the weather. Discretion is given to the supervisor to determine if a particular job is impacted by the weather at the location of the work, not the weather report for the city in general. (see General Provisions Section 2 of the Work Agreement)

Finding 1, Bullet 7 – It has been a practice for a number of years, at the request of Human Resources, to allow employees to return to work with restrictions from personal injuries. The prevailing thought is that employees recovery to full duty is quicker when they are allowed to be productive in a limited capacity rather than on leave until released. In these cases, the employee time cannot be reported as Light Duty. The Light Duty code in the payroll system is specifically for Workman's Comp reporting.

Finding 1, Bullet 8 – Employees are granted Sick Leave, Vacation, and Personal Business leave at their request, consistent with the needs of the department. They are not required to divulge the nature of their illness, and documentation of the illness is not required unless the employee has been off for three consecutive days or longer. (see Sick Leave section 4 of the IBEW Work Agreement) This practice was adopted by IPL prior to 2012 at the direction of Human Resources to be consistent with other departments.

Recommendation 1 – Employees and supervisors will be trained in the use of Executime when it becomes available. The use of time clocks would necessitate negotiation with IBEW for establishing clock-in/clock-out parameters, rounding conventions, and other details to ensure proper validation of time keeping and accurate accounting of the complex overtime provisions in the Work Agreement.

Recommendation 2 – IPL timekeeping is already a manual/paper timesheet procedure, submitted by each crew leader and approved by the T&D Superintendents. Multiplying the paperwork by three or four will not guarantee any increased accuracy and quite possibly increases the opportunity for error. Maintaining a clearly documented change/correction process will enhance the integrity of payroll procedures (see Finding 1 Bullet 1). Supervisors and timekeepers have already been instructed to adopt these measures.

Recommendation 3 – The Work Agreement does include very complicated overtime compensation rules and work rules that necessarily result in additional overtime costs. The city would benefit from a review of overtime rules. Changes will require negotiation with IBEW.

Recommendation 4 – Work orders started on Overtime are not used for routine maintenance with the exception of situations as described in the response to Bullet 2 above. Outages are considered a matter of public health and safety, and work is ordered to correct an outage or a

situation likely to cause an outage if not mitigated. In addition, Meter Readers are authorized overtime work on Saturdays as needed to maintain the billing cycle.

Recommendation 5 – The Inclement Weather policy is detailed in the IBEW Work Agreement.

Recommendation 6 – Restrictions on the use of leave will require additional negotiation with IBEW.

Recommendation 7 – Multiple software systems used by IPL are not currently interconnected. Cityworks and MUNIS are both recently adopted and are still being developed. Integrating these programs along with Customer Service and the Outage Management System and remote terminal applications for field crews would be a positive enhancement.

Recommendation 8 – As noted in the response to Bullet 2, all time is captured on the time sheets for individual work orders. The Unaccounted work referred to is work that does not fall under specific work orders per FERC accounting rules.

Recommendation 9 – The development and full implementation of Cityworks is in progress by our internationally recognized System Programs group.

Recommendation 10 – IPL has purchased software licenses and is coordinating with Tech Services to provide connectivity to Field personnel.

Finding 2 – The audit finding is correct that some management employees have received little or no formal supervisor training. The IBEW Work Agreement, the Personnel Policies and Procedures manual, quarterly supervisor training coordinated by Human Resources and courses offered by MARC have been the primary tools used to train new supervisors. Appropriate training topics will be added to the agenda of the monthly IPL Supervisor/Management meetings once all staff returns to work to establish an ongoing supervisory training program.

Recommendation 11 – IPL is currently engaged in a management review with DKMT Consulting, LLC. Following in-depth interviews and document reviews, DKMT and IPL management will develop a targeted improvement plan. Industry Best Practices and Standard Operating Procedures (SOP) are within the scope of that plan. All supervisory staff will be trained on SOPs as they are developed.

Finding 3A – The Troubleman position is scheduled around the clock in order to respond to outages and other incidents because they occur at all times of the day and night. It is expected that the night shift will be responsible for reviewing streetlights because that's when you can see which ones are out or flickering and need addressed. The suggestion to prep downed poles and put up cones accurately describes what they already do. The Troubleman assesses the accident site, makes sure it is safe, moves poles out of the way of traffic, and puts out traffic cones as needed. The Troubleman does have assistance in troubleshooting – they coordinate with the Trouble Dispatcher to assess the situation. The Troubleman provides a vital function for

identifying issues that occur during off hours and assessing whether it needs immediate action or can be deferred until the day shift arrives. In order to provide 24/7 coverage for this function, overtime costs will be incurred to cover absences such as vacation and sick leave.

Finding 3B – Outsourcing streetlight maintenance would not eliminate the need for T&D response to those work orders. T&D personnel would still have to be called to disconnect/connect power to complete the work. Rather than contract out the work and pay a premium cost for labor, it would be appropriate for IPL and Municipal Services to develop a coordinated maintenance and operating plan for city streetlights.

Finding 3C – Changing out poles, transformers, conductors (cable) and other attachments is the primary work of the T&D Overhead crews. What appears to be a wide variance in the time spent is due to the complex nature of those jobs. A “Pole Change Out” work order could be to replace a single pole with one residential service line, or it could involve multiple poles, transformers, replacing line and also coordinating with cable and phone services that might be located on those poles. One work order reviewed involved replacing six (6) poles and moving all the associated attachments to complete the work. There is no evidence that contracting out this work would save the city any costs. Labor costs alone are typically a 25% markup over prevailing wages.

Finding 4 – IPL does not agree with the assumptions made in this finding; no production staff were interviewed over the course of this audit. Staff welcomes the opportunity to meet with the Management Analyst to answer any questions, provide background information, and outline future operating plans to assist in development of this finding and recommendation. Neither Maintenance activities nor manpower requirements are a 1:1 ratio of the MW rating. IPL management and IBEW worked very closely to develop a plan for the Blue Valley plant closure and future production operations. The current plan actually uses less staffing than the industry best practices proposed by our consultant. It also needs to be stressed that the current staffing levels are not presumed to be the final result that will be determined over the next 12-18 months as we actually gain experience in operating without the boiler plants and cross train employees. The most recent work agreement contemplates this with ultimate staffing levels reduced to approximately ten FTEs once the transition is complete. Our organization has never operated under these conditions and adjustments will be made as we determine the actual requirements, develop new operating procedures and discover efficiencies to right-size the department.

Recommendation 12 – Reasonable assumptions were made in the development of the operating plan. Budgets will be refined along with the organizational structure and operating requirements as we learn and adjust to the new mode of operation. This flexibility was negotiated into the IBEW agreement.

Finding 5, Recommendation 13 – IPL Production assets and Substation System Protection components are tested and maintained on a cycle schedule based on industry or North American Electric Reliability Corporation (NERC) standards. There is not a programmed cycle schedule

for routine maintenance of T&D installations. T&D equipment is repaired/replaced on an as needed basis, identified by customer contacts, IPL District Planner inspections, or spot inspections by T&D personnel as they observe equipment throughout the city. In addition, equipment may be inspected/replaced using windows of opportunity such as a substation overhaul, or during maintenance outages. Data is being collected and input into the CityWorks program that will allow us to develop a predictive maintenance plan targeting equipment based on its depreciation schedule, using age as a trigger for an inspection and condition assessment. The IPL System Programs group is currently working on a project to develop applications for CityWorks.

The IPL management team appreciates the opportunity to review and comment on the findings of this audit.

Jim Nail
Assistant General Manager
Power & Light Department



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A GREAT AMERICAN STORY

DATE: June 19, 2020
TO: Mark Thoma Perry, City Management Analyst
CC: Zach Walker, City Manager
Jim Nail, Assistant General Manager (Interim)
Shannon Marcano, City Counselor
FROM: Adam Norris, Assistant City Manager
SUBJECT: City Management Response to IPL Review

Thank you for your work in evaluating IPL operations, identifying areas of improvement, and developing recommendations for corrective action. I have reviewed the report as well as the response from the Department. The City Manager's Office and IPL have offered to meet and discuss the findings and recommendations in the report as well as the Department's response. Below are responses and comments from the City Manager's Office:

RECOMMENDATION	RESPONSE
1	Implementation of Executime is a priority for all City Departments. Light Duty is typically provided in cases of an ADA accommodation as opposed to Work Comp. This would not be noted on a time card due to reporting restrictions, rather it would be noted in the employee's medical file.
2	The Department indicates this recommendation is already in place.
3	City Management agrees this would be beneficial for all work agreements.
4	City Management agrees overtime should not be used for routine maintenance unless a strong business case exists. The Department has indicated this is not a practice, with few exceptions noted in the response. As a matter of customer service, work affecting commercial businesses are scheduled off-hours to minimize disruption to the business. SOPs should be developed to establish conditions and protocol relative to emergency conditions involving public health and safety.



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5	<p>City Management agrees with the Department response; Article 15, Section 2 of the Work Agreement outlines the Inclement Weather Policy. IBEW could grieve any deviations or inconsistencies from the work agreement. Safety concerns should be discussed with the employee's supervisor or other personnel in the chain of command.</p> <p>Time worked during conditions that meet the inclement weather policy standards should be productive and to the benefit of the Department and Department personnel. The policy does provide for differentiating work among crews:</p> <p><i>In situations where employees are working in different localities, performing substantially similar job tasks, and the inclement weather conditions are substantially the same in the different localities, all of the employees will be treated substantially the same; with the understanding that even where weather conditions are exactly the same, certain types of work may be performed by some crews whereas other crews, with no such work to perform, will not be asked to work unless such work is necessary to protect life or property or to maintain service to the public. It is understood that the foreman and the employees will cooperate in the application of the above general principle.</i></p>
6	<p>City Management agrees abuse of sick leave should not be tolerated. Under current policy, employees are 100% vested up to City accrual limits for vacation and sick leave. This policy merits review and could mitigate against future sick leave abuse; any changes will require negotiation with IBEW.</p> <p>City Management reviewed sick leave taken as a percent of total leave for all City utilities in 2019. The results are as follows and does not indicate excessive sick leave use in comparison to the other utilities:</p> <p>WPC: 33.3% Water: 29.3% IPL: 34.6%</p>
7	<p>City Management agrees with this recommendation and the Department's response.</p>



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8	City Management agrees all time should be accounted for; provided it demonstrates ROI or provides additional value in the overall management of the utility.
9	City Management agrees with this recommendation and the Department's response.
10	City Management agrees with this recommendation and the Department's response.
11	City Management agrees with this recommendation and the Department's response.
12	As noted in the Department's response, reasonable assumptions were made in developing the budget and operating structure of the CTs. Section 11 of the Work Agreement outlines a period of cross-training and further staff reductions once the operation has stabilized. It should be noted that the "No Layoff" provision in the previous agreement was negotiated out of the current agreement; this enabled the closure to proceed. This partially informed the operating structure, as it required agreement by IBEW. City Management also refers to the Department's response to Finding 4 in response to this recommendation.
13	City Management agrees with this recommendation and the Department's response.
14	City Management agrees with this recommendation. City Management believes benchmarking in many areas of the operation would be beneficial.
15	Backup documentation for the information provided in the annual audit report is available.



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A GREAT AMERICAN STORY

DATE: June 26, 2020
TO: Mark Thoma Perry, City Management Analyst
CC: Zach Walker, City Manager
Jim Nail, Assistant General Manager (Interim)
Adam Norris, Assistant City Manager
Bryan Kidney, Director of Finance and Administration
FROM: Shannon Marcano, City Counselor
SUBJECT: City Counselor Response to IPL Review

In accordance with Section 1.43.006 of the Independence City Code, I am in receipt of the draft Independence Power and Light Performance Audit Findings and Recommendations, dated June, 2020 (the "Report") and prepared by you. I have reviewed the draft Report as well as the response from the Department (IPL), and the City Manager's Office. Section 1.43.006 (B) (3) requires that once the City Counselor reviews the draft Report, she must provide a written response to you indicating whether any information contained in the draft Report would expose the City to legal suit, and if the Report would qualify for discussion during an executive session of the Audit and Finance Committee or City Council. Please let this communication serve as the required written response.

First, after reviewing the information presented in the draft Report, I have no reason at this time to believe that the information contained within it would expose the City to legal suit.

Second, it is my opinion that the Report would not, in its totality, qualify for discussion during an executive session of the Audit and Finance Committee, nor the City Council. It is the policy of the City of Independence and the State of Missouri to support openness in government. Any proposed discussion of any information contained within the Report would need to be scrutinized under the Missouri Sunshine Law, Chapter 610, RSMo, before taking place.

Performance Audit: Addressing IPL Efficiency and Effectiveness

Draft Scope Statement

Finance & Audit Committee

August 23, 2019

Whereas, Section 3.17 of the City Charter states “The municipally owned and operated electric system is a public utility and shall be operated in a businesslike manner.”; and,

Whereas, the Mission of Independence Power and Light is to provide low-cost, environmentally friendly, and reliable electric energy service; and,

Whereas, the 2018 City of Independence Citizen Survey found that 78% of respondents were satisfied with electric service reliability, 76% were satisfied with how quickly outages were repaired and 44% were satisfied with the value of the electric utility service; and,

Whereas, the Energy Master Plan for IPL was presented to the City Council on August 27, 2018; and,

Whereas, the City Council, pursuant to Energy Master Plan recommendations, has entered into a Power Capacity Contract with Oneta Power; and,

Whereas, the City Council, pursuant to Energy Master Plan recommendations, has remanded to the Public Utilities Advisory Board for review and recommendation a Resolution conveying the City Council’s intent to retire the Blue Valley power plant; and,

Whereas, the City Council adopted Resolution 6386 directing the City Manager to implement a rate reduction for all IPL customers of 2%; and,

Whereas, the City Council adopted Resolution 6436, as Amended, which authorized and directed the City Manager to implement a rate reduction for all Independence Power & Light Customers of at least 4% starting August 1, 2019; and,

Whereas, the 2019-20 Adopted Budget reduced the IPL budget by \$5,454,000 in order to offset the revenue reduction; and,

Whereas, a recent Independence Examiner editorial asked about IPL “where’s the assurance that a year from today the ratepayers will know that things have been set on a steady course toward reasonable outcomes?”.

NOW, THEREFORE the City Council directs the City Management Analyst to conduct a performance audit of Independence Power and Light operations. The purpose of this audit is to analyze the efficiency and effectiveness of current IPL programs and services by compiling data on costs and performance metrics so that strategic and sustainable budget changes can be implemented and IPL customers are provided low-cost, environmentally friendly, and reliable electric energy service.

Audit & Finance Committee
August 23, 2019

Members Present: Councilmember Karen DeLuccie, Councilmember Scott Roberson, Councilmember John Perkins (via conference phone)

Others Present: Mark Thoma-Perry, Mark Randall, Sarah Carnes-Lemp, Kristen Ayers, Zach Walker

The meeting was called to order at 11 a.m. by Committee Chair, Councilmember DeLuccie.

There was a quorum present.

The minutes of the April 26, 2019 meeting were held over for approval at the next meeting.

Staff distributed a draft scope statement for a Performance Audit addressing IPL efficiency and effectiveness. During discussion, staff referred to the purpose of the audit is to analyze the efficiency and effectiveness of current IPL programs and services by compiling data on costs and performance metrics so that strategic and sustainable budget changes can be implemented and IPL customers are provided low-cost, environmentally friendly, and reliable electric energy service. The Committee discussed the need for every cost to be reviewed including, but not limited to, the impact of the 6% rate reduction, all things inventoried, as well as overtime costs.

Upon completion of discussion of the draft scope, Councilmember Roberson moved to accept the draft scope statement and approve the Management Analyst beginning field work for the audit as soon as possible. Councilmember Perkins seconded and the motion was approved unanimously.

There were no further comments from staff or the committee and Councilmember Roberson moved that the meeting adjourn at 11:20 a.m., Councilmember Perkins seconded and the meeting adjourned.



DATE: November 26, 2019

TO: Councilwoman Karen Deluccie, Councilman John Perkins, Councilman Scott Roberson

FROM: Mark Thoma-Perry, Management Analyst

RE: IPL Performance Audit Update

Since my October Audit update to the Committee I have been working to define the budget, personnel and performance metrics for each of the identified discreet IPL activities. I am beginning to formulate efficiency and effectiveness recommendations. My plan is to have my full report completed by the end of January.

However, I have discovered payroll and timekeeping practices that do not appear to align with the Personnel Policy and Procedures Manual and the current Memorandum of Agreement between the City and IBEW Local Union 53. I believe this discovery to be serious enough in nature to warrant consideration now as opposed to waiting until I issue the full report.

Therefore, I recommend that the Audit and Finance Committee direct the City Manager to conduct immediately a review of IPL payroll internal controls in order to mitigate the risks of fraud and various errors and to report findings to the Committee within 45 days.

Subject matter experts should determine the full scope and depth of the review, but it should include:

- Timekeeping submittal and approval processes
- Verification that payroll payments are being calculated correctly, including
 - hours worked
 - pay rates used
 - tax deductions
 - withholdings
- Segregation of duties



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A GREAT AMERICAN STORY

DATE: JANUARY 31, 2020

TO: Zach Walker, City Manager

CC: Jennifer Vargo, Chief Human Resources Officer
Bryan Kidney, Director, Finance and Administration
Jim Nail, Interim Assistant General Manager, IPL

FROM: Adam Norris, Assistant City Manager

SUBJECT: City Management Analyst Review of IPL

BACKGROUND

On November 26, 2019, the Audit and Finance Committee received a memo from the City Management Analyst indicating potential issues with payroll and timekeeping practices at IPL may not align with the Personnel Policies and Procedures Manual and the current agreement between the City and IBEW Local 53. Subsequent to the November 26 meeting, the City Council passed a resolution directing the City Manager to review payroll internal controls including timekeeping submittal and approval process, verification of payroll payments being calculated correctly, and segregation of duties. Findings were to be reported back to the Audit and Finance Committee within 45 days.

In early December, Jennifer Vargo, Chief Human Resources Officer, consulted the City's external financial report auditor, Chester Moyer—a partner with Rubin Brown, LLC—relative to the City Management Analyst's memo. Mr. Moyer recommended that Jennifer meet with Mark Thoma-Perry to determine the scope of his findings. Mr. Moyer further indicated that unless there was anything discovered that would materially impact the City's financials, City staff should conduct as much of the review as possible.

Rubin Brown intends to submit their opinion letter on the City's financial statements in March. As of the date of this memo, staff has not been notified from Mr. Moyer that anything in their testing has been identified that would be materially significant to the City's financials.

Jennifer met with Mark in December and he indicated that his two areas of concern in IPL were: 1) administration of overtime for exempt employees and 2) lunch hour recording practices in IPL, specifically in Transmission and Distribution. Mr. Thoma-Perry clarified to Jennifer that this was not "fraud" as he indicated to the Audit and Finance Committee, rather his memo should have indicated his concerns were with policy interpretation and management practices. Jennifer verified and Mr. Thoma-Perry agreed that he believes there are widespread issues with timekeeping practices but more from an oversight and accountability standpoint and not fraud.



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Following the issuance of the City Management Analyst's findings and during the course of City Management's review, an employee in IPL (Employee 1) brought forth allegations against another IPL employee (Employee 2), which involved falsifying time and overuse of out of position pay. Because of the complicated nature of the matter and limited availability of resources due to MUNIS implementation, the City hired an external investigator to conduct an investigation of the allegations. At the same time, Employee 2 filed a formal complaint against the Employee 1 for harassment, retaliation and hostile work environment. The City's external investigator met with both employees, other identified witnesses, and has reviewed relevant documentation and video. The results of that investigation are still pending.

The investigator is trying to determine the timekeeping practices that Employee 2 follows. This relates to the allegations Employee 1 made but it may be reasonable to assume the same practice may be taking place in other IPL divisions (and perhaps other places in the City). We are recommending that the investigator meet with Mark Thoma Perry as a next step and prior to finalizing the investigation.

Overtime and standby pay for exempt employees in IPL has received considerable attention over the course of the past several years. Article VI of the City's Personnel Policies and Procedures Manual speaks to this issue:

Stand-By Pay is defined as follows in Section 8:

Off-duty hours when the employee is required to respond if called to report to work and is subject to disciplinary action for failure to respond. Employees, both exempt (except department directors and division managers) and non-exempt, will be compensated for time spent on stand-by pay. Stand-by compensation will be two (2) hours at the employee's overtime rate for each twenty four (24) hours of availability, except as provided herein. Response time requirements will be determined by the employee's department director.

Section 6.e. provides guidance relative to the conditions overtime may be granted to exempt employees:

Compensation in excess of salary may be granted to exempt employees under emergency conditions which directly involve the health, safety and/or welfare of employees or citizens. Such pay must have prior approval of the City Manager.

CURRENT FINDINGS

Timekeeping practices:

- Developed baseline understanding of timekeeping practices in IPL; process mapping in conjunction with MUNIS implementation.



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- Many timekeepers keep their own records.
- There is not a strong approval checks and balances practice for time records in IPL or other City departments.
- Policies and contracts (both IPL and other areas) have been interpreted and applied to timekeeping inconsistently and liberally.

Standby/Overtime for Exempt Employees:

Based on 2019 records, exempt IPL personnel with standby pay and/or overtime are as follows:

- Transmission and Distribution: Four employees in the Transmission and Distribution Division (Transmission and Distribution Manager and three T&D Superintendents) receive 2 hours per day of stand-by pay for one person, rotating among the group as front-line supervisors for after-hours repairs.
- Production Division: Similar to Transmission and Distribution, four employees in the Production Division receive 2 hours of standby pay per day rotated among the group (Production/Engineer III, Production/Facility Maintenance Supervisor, Production/Facility Maintenance Supervisor; and Production/Maintenance Superintendent). The Production Operations Superintendent receives 2 hours of standby pay each Saturday and Sunday.
- Other IPL Divisions: Records indicate the following positions receive overtime on a callout basis only: Tree Trimming Superintendent, T&D Revenue Protection/Inspectors (2), Telecommunications Supervisor and Telecommunications Coordinator.

CURRENT RECOMMENDATIONS:

Timekeeping:

- Management continues to implement best practices in timekeeping and reporting to bring consistency throughout the organization. This has been facilitated with the implementation of MUNIS.
- IPL's Assistant General Manager has instituted additional oversight and accountability measures for all overtime.
- The City's investigator meet with the Management Analyst prior to concluding the investigation.

Standby pay/overtime:

- Transmission and Distribution: It is recommended that the T&D Manager position be eliminated. Based on interviews with the T&D Superintendents and reviews of their job descriptions, their positions function as both high-level managers and front-line supervisors. This creates a flatter organization, which in theory is more flexible and efficient. It is recommended that the salaries for these positions be adjusted and the ability to receive standby pay or overtime is eliminated,



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unless the conditions in the City's Personnel Policies are met and approved by the City Manager's Office.

- Production: It is recommend that standby pay be removed for the Production Engineer immediately and for Production/Facility Maintenance Supervisor and Production/Maintenance Superintendent effective June 1, 2020, upon closure of the plant, with the exception of emergency conditions in accordance with City policy. One Production/Facility Maintenance Supervisor was transferred in 2019 and no longer receives standby pay. For the Production Operations Superintendent, it is recommended that effective immediately, standby pay be provided on weekends only when Blue Valley plant is operating, when Southwest Power Pool has declared conservative operations, or for other emergency conditions in accordance with City policy.
- Other IPL Divisions: It is recommended these employees continue to be eligible for standby or overtime when conditions and approvals are made in accordance with the Personnel Policies and Procedures Manual.