



ELECTRIC DEPARTMENT

2019 BUDGET PRESENTATION TO CITY COUNCIL

AUGUST 27, 2018

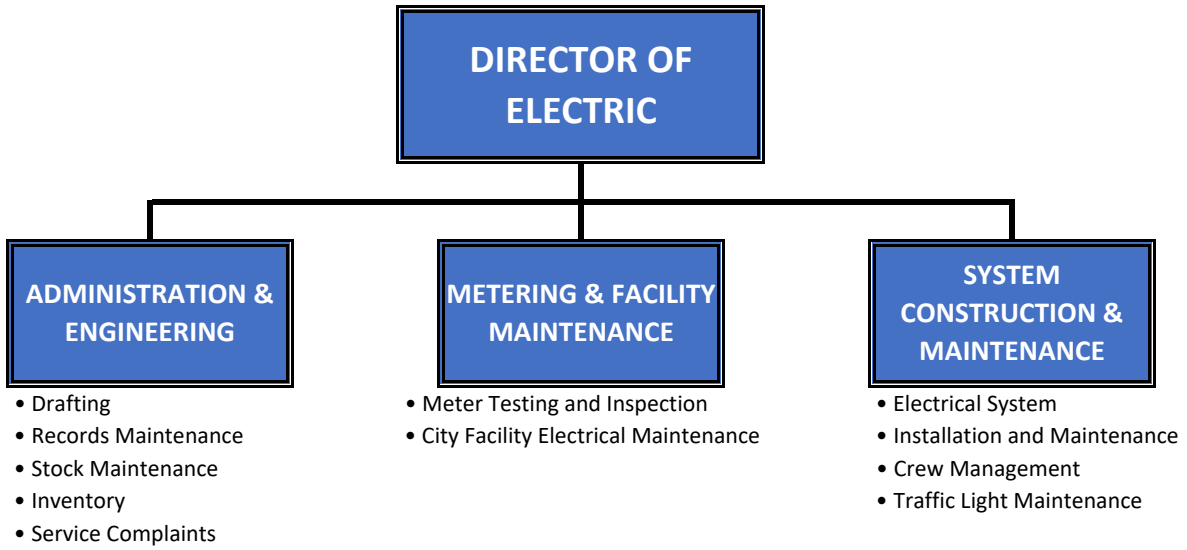
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**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
EXECUTIVE SUMMARY**

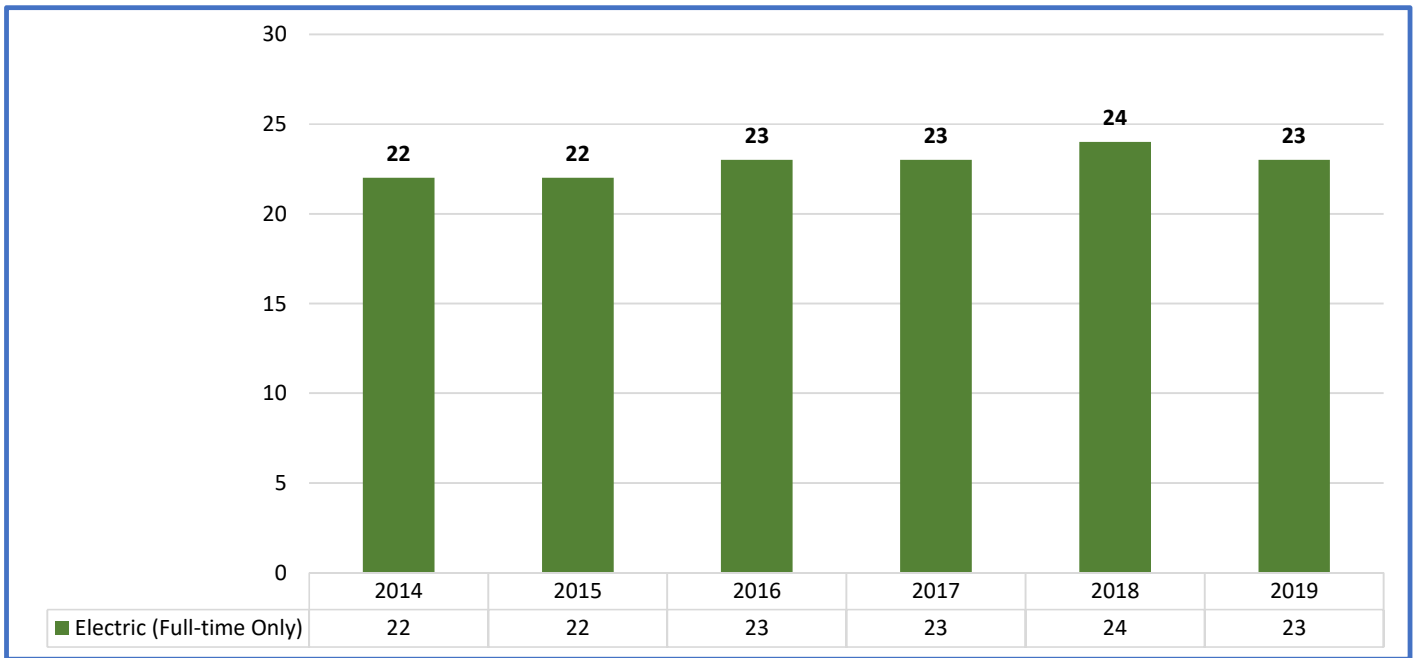
EXPENDITURE BUDGET					
Object Level Detail:	FY2018 Appr'd	FY2019 Rec'd	FY2018 App'd vs. FY2019 Rec'd	% +/- over FY2018 Appr'd	Comments
<i>Full-time Wages</i>	\$1,838,499	\$1,770,477	-\$68,022	-3.70%	<i>Deletion of one Deputy Director position. Offset by scheduled merit increases for eligible employees.</i>
<i>Part-time Wages</i>	\$0	\$0	\$0	#DIV/0!	<i>No 2018/2019 Part-time Wages</i>
<i>Other Wages</i>	\$251,049	\$317,814	\$66,765	26.59%	<i>Increase in overtime (\$85,000) for reimburseable projects. There will be offsetting revenue for this increase.</i>
<i>Benefits</i>	\$1,200,340	\$1,218,767	\$18,427	1.54%	
Personnel Services	\$3,289,888	\$3,307,058	\$17,170	0.52%	*Sum of above listed wages and benefits
Materials and Supplies	\$297,830	\$303,830	\$6,000	2.01%	Increase of \$5,000 for substation maintenance. \$1000 increase is needed for general supplies within the Electric Department.
Contractual Services	\$1,577,867	\$1,682,614	\$104,747	6.64%	\$60,000 increase for credit card and merchant fees. Added \$50,000 for rate study, increased outside engineering by \$25,000. Elster upgrade (radio infrastructure) will cost approximately \$21,000.
Depreciation	\$201,500	\$278,832	\$77,332	38.38%	*Finance Calculation
Other Expenditures	\$864,912	\$974,888	\$109,976	12.72%	Moved Catholic Charities (\$25,000 annual contribution) from Contractual Services, and added \$60,000 subvention to the Newark Senior Center (previously deducted from sales revenue).
Sub-Total:	\$6,231,997	\$6,547,222	\$315,225	5.06%	
Inter-Dept. Charges	\$423,780	\$733,105	\$309,325	72.99%	Reflects the cost share of City overhead which includes: Administration, Billing and Accounting, Electricity, Information Technology, Printing/Reproduction, Street Lights/Traffic Signals and Warehousing.
Total Operating Expenses:	\$6,655,777	\$7,280,327	\$624,550	9.38%	
Full-time Positions	24	23	-1		Decrease of 1 FTE for Deputy Director of Electric

CAPITAL IMPROVEMENTS PROGRAM 2019-2023		
Project ID:	Project Description:	Comments
<u>New projects:</u>		
E1901	New Lines and Services	Perpetual Project
E1911	34kV Line 3202 Capacity Upgrade	New Project
E1912	35kV Disconnect Switches Replacement - Kershaw Substation	New Project
<u>Ongoing projects</u>		
E1801	New Lines and Services	Projected to be completed by EOY 2018.
E1804	Spacer Cable Replacement	Projected to be completed by EOY 2018.
E1805	Line Extension - UD Farm	Project listed in 2019-2023 CIP
E1806	Christianstead Cable Addition	Project listed in 2019-2023 CIP
E1807	Relay Replacements - Kershaw Substation	Project listed in 2019-2023 CIP
E1808	Voltage Upgrade - North College Avenue	Project listed in 2019-2023 CIP
E1809	12.47kV Line Extension	Project listed in 2019-2023 CIP
E1810	Lightning Arrestor Replacement	Project listed in 2019-2023 CIP
E1602	Circuit Breaker Replacement	Project listed in 2019-2023 CIP
E1502	Underground Distribution - UD Star Campus	Project listed in 2019-2023 CIP
E1203	CAD Software	Project listed in 2019-2023 CIP
E1105	Upgrade Substation Transformers and Circuit Breakers	Projected to be completed by EOY 2018.
E0503	SCADA and Automatic Switching	Project listed in 2019-2023 CIP
EEQSF	Equipment Replacement Program	Perpetual Project

**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
ORGANIZATIONAL CHART**



**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
Full Time History/Vacancies as of August 13, 2018**



FULL TIME VACANCIES (Included Above)

Division	Title	#	Reason for Vacancy
Electric	Electric Groundhand	1.0	Employee Turnover
Total		1.0	

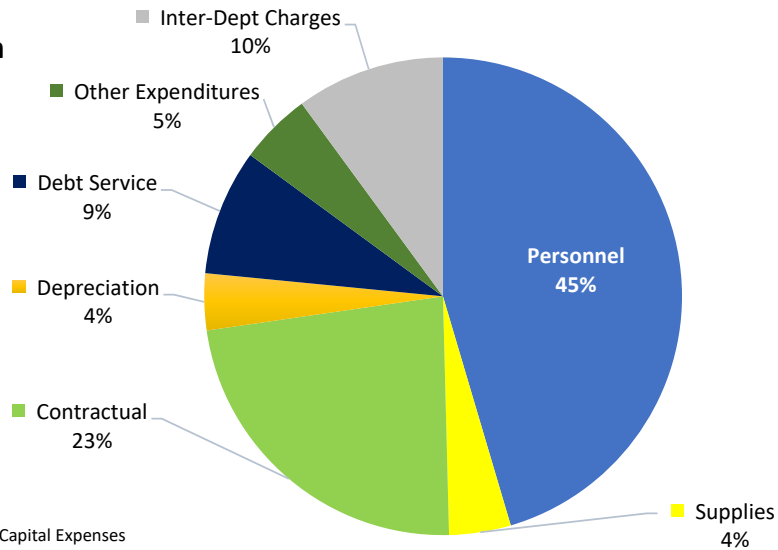
COMMENTS

Division	Title	Change (+/-)	Reason for Adjustment
Electric	Deputy Director of Electric	(1.0)	Employee Turnover/Department Realignment
Electric	Senior Lineman	1.0	Reclassification
Electric	Junior Lineman	(1.0)	Reclassification
Electric	Electric Groundhand	1.0	Reclassification
Electric	Lineman 1st Class	(1.0)	Reclassification
Total		-1.0	

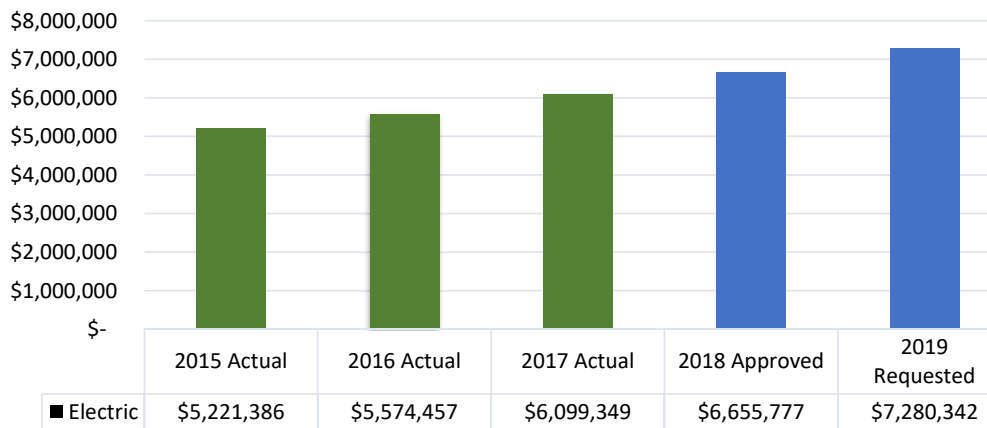
**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
FY2019 BUDGET RECOMMENDATION**

Object Level	FY2018 Approved	FY2019 Recommended	FY2018 Approved vs. FY2019 Recomm'd	% Incr (Decr) over FY2018 Approved
Personnel Services	\$ 3,289,888	\$ 3,307,058	\$ 17,170	0.5%
Materials and Supplies	\$ 297,830	\$ 303,830	\$ 6,000	2.0%
Contractual Services	\$ 1,577,867	\$ 1,682,629	\$ 104,762	6.6%
Depreciation	\$ 201,500	\$ 278,832	\$ 77,332	38.4%
Debt Service	\$ 620,662	\$ 620,648	\$ (14)	0.0%
Other Expenditures	\$ 244,250	\$ 354,240	\$ 109,990	45.0%
Inter-Dept Charges	\$ 423,780	\$ 733,105	\$ 309,325	73.0%
Subtotal (Operational Expenses)	\$ 6,655,777	\$ 7,280,342	\$ 624,565	9.4%
Capital Expenses*	\$ 825,000	\$ 1,161,218	\$ 336,218	40.8%
Total:	\$ 7,480,777	\$ 8,441,560	\$ 960,783	12.8%

FY2019 Budget Allocation



Budget vs. Actual History

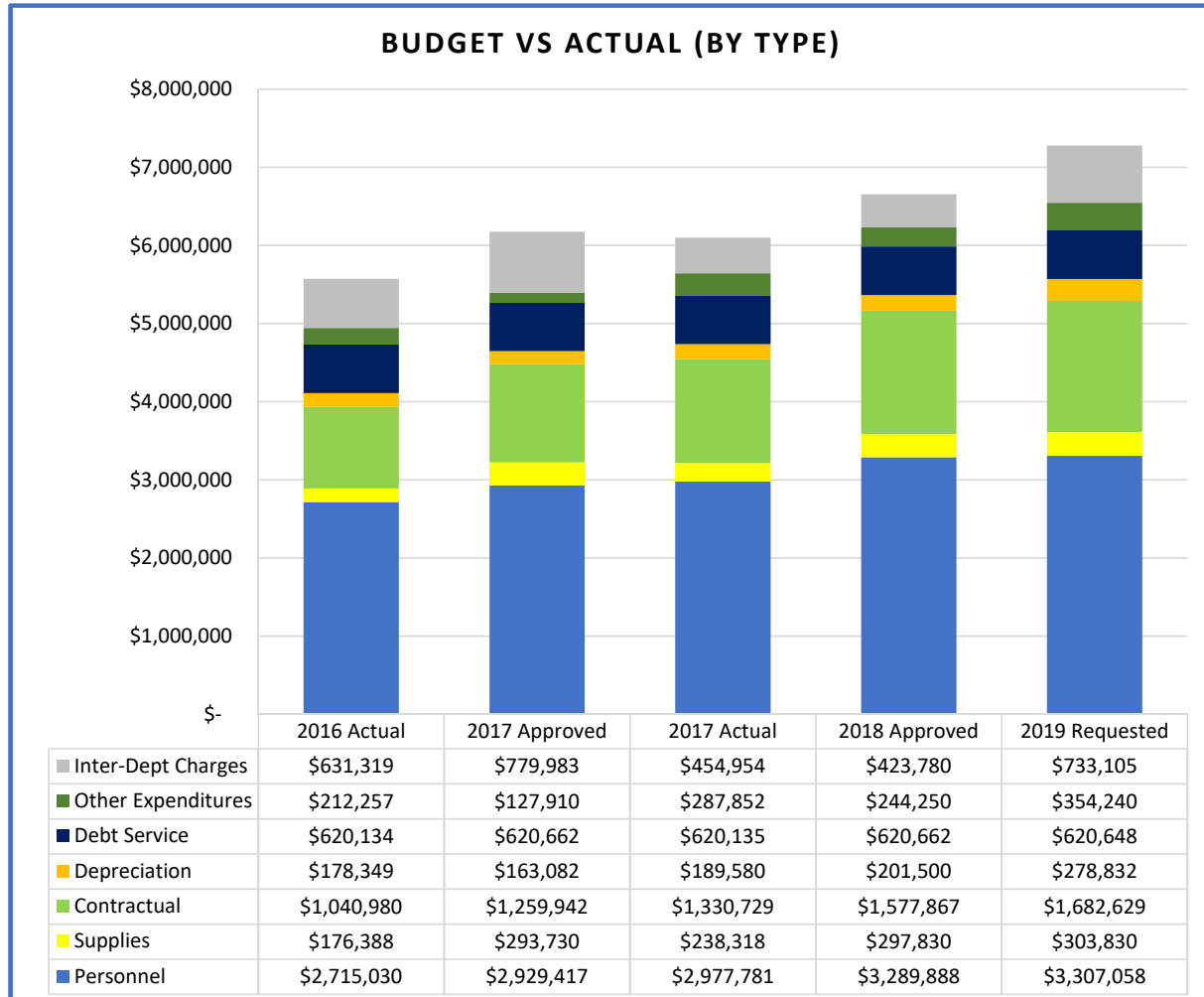


* The allocation of capital expenses between current resources and reserve funding will be determined based on revenue projections.

**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
FY2019 BUDGET RECOMMENDATION**

Object Level (\$)	2016 Actual	2017 Approved	2017 Actual	2018 Approved	2019 Requested
Personnel Services	\$ 2,715,030	\$ 2,929,417	\$ 2,977,781	\$ 3,289,888	\$ 3,307,058
Materials and Supplies	\$ 176,388	\$ 293,730	\$ 238,318	\$ 297,830	\$ 303,830
Contractual Services	\$ 1,040,980	\$ 1,259,942	\$ 1,330,729	\$ 1,577,867	\$ 1,682,629
Depreciation	\$ 178,349	\$ 163,082	\$ 189,580	\$ 201,500	\$ 278,832
Debt Service	\$ 620,134	\$ 620,662	\$ 620,135	\$ 620,662	\$ 620,648
Other Expenditures	\$ 212,257	\$ 127,910	\$ 287,852	\$ 244,250	\$ 354,240
Inter-Dept Charges	\$ 631,319	\$ 779,983	\$ 454,954	\$ 423,780	\$ 733,105
Subtotal (Operational Expenses):	\$ 5,574,457	\$ 6,174,726	\$ 6,099,349	\$ 6,655,777	\$ 7,280,342
Capital Expenses*	\$ 966,305	\$ 1,722,000	\$ 1,384,675	\$ 825,000	\$ 1,161,218
Total:	\$ 6,540,762	\$ 7,896,726	\$ 7,484,024	\$ 7,480,777	\$ 8,441,560

Object Level (%)	2016 Actual	2017 Approved	2017 Actual	2018 Approved	2019 Requested
Personnel Services	48.7%	47.4%	48.8%	49.4%	45.4%
Materials and Supplies	3.2%	4.8%	3.9%	4.5%	4.2%
Contractual Services	18.7%	20.4%	21.8%	23.7%	23.1%
Depreciation	3.2%	2.6%	3.1%	3.0%	3.8%
Debt Service	11.1%	10.1%	10.2%	9.3%	8.5%
Other Expenditures	3.8%	2.1%	4.7%	3.7%	4.9%
Inter-Dept Charges	11.3%	12.6%	7.5%	6.4%	10.1%
Total:	100.0%	100.0%	100.0%	100.0%	100.0%



* The allocation of capital expenses between current resources and reserve funding will be determined based on revenue projections.

**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
FY2019 PROGRAM NARRATIVE**

The City of Newark operates its own electric utility to provide electric services to 13,000 meters, supporting commercial and residential customers within city limits. Power is purchased on the wholesale power market and delivered by the City. The electric department is responsible for maintaining 175 miles of electric lines and coordinates its services through several programs. They include:

Meter Relay and Electrical Maintenance Program:

Responsible for installing and maintaining electrical systems in city buildings, water wells, water and waste water pumping stations, traffic lights and control systems, meters and other facilities.

Electrical Line Construction and Maintenance Program:

Responsible for maintaining the City's electric lines, substation sites, substation units, circuit breakers, and transformers.

In addition to maintaining the City's electrical distribution system, new power lines, substations and underground electric utilities are constructed and installed to expand services to new customers. Additional departmental responsibilities include maintaining and installing street lights and traffic signals, trimming trees along electric right-of-way, and providing distribution and sub transmission switching and sectionalizing. Staff are also responsible for plans review, drawings and engineering analysis for construction work.

**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
FY2018 ACCOMPLISHMENTS**

Key accomplishments in 2018 include:

- The installation of a new 10MVA substation transformer at South Chapel Street Substation. This transformer will provide increase capacity and ensure greater reliability in the southern section of the City. The project is in progress and we are on track to complete this project by end of this year.
- The existing aerial spacer cable along the railroad from Apple Road to Forest Lane was replaced.
- The installation of 12kV distribution automation system. This 12kV distribution automation system will increase reliability to our industrial customer at Delaware Technology Park and Bellevue Road as well as minimize our substation outages. The project is in progress and we are on track to complete this project by end of this year.
- The installation of 34kV underground feed at STAR Campus. This 34kV feed will provide service to Chemours as well as new customers at STAR Campus. This project is in progress and we are on track to complete this project by end of this year.
- The expansion of 12kV info structure at STAR Campus.

**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
FY2019 GOALS**

Goals for 2019 include:

- In 2019, more 12kV reclosers will be installed to improve reliability to the UD Center Campus and North Campus.
- A 12kV distribution line will be extended at UD Farm to ensure capacity and reliable back-up capacity to the Star Campus, The University of Delaware South Campus and City customers on South College Avenue.
- A new 12kV line extension. This is needed for additional capacity and back-up capacity for the Star Campus. This extension will also tie Sandy Brae substation transformer 64 to Chestnut Hill Road transformers 64 and 94 to provide back-up capacity.
- Feasibility of creating an impact fee for new electric customers and possibly an electric rate study.

ELECTRIC DEPARTMENT OPERATING BUDGET

**ELECTRIC DEPARTMENT
FY2019 RECOMMENDED BUDGET
PERSONNEL SERVICES**

Object Level	FY2019 Recommended	\$ Change over FY2018	% Change
Personnel Services:	\$3,307,058	\$17,170	0.5%
Wages:	\$2,088,291	-\$1,257	-0.06%
Benefits:	\$1,218,767	\$18,427	1.54%
Health insurance assumes an increase of 8% for 2019, which is equal to the increase experienced by the City in 2018. Salary assumptions include anticipated step increases when due per contract, applicable cost of living adjustments for AFSCME & CWA employees. Includes the deletion of one position (Deputy Director of Electric). Overtime was increased by \$85,000 for reimburseable jobs performed by the Electric Department.			

Personnel Services (Org: 5195102)

Object Line	2018	2019	\$ Difference	% Difference
6020 Supervisory	\$ 326,141	\$ 219,551	\$ (106,590)	-32.7%
6030 Engineering/Technical	\$ 296,989	\$ 313,352	\$ 16,363	5.5%
6040 Warehousing	\$ 58,451	\$ 60,509	\$ 2,058	3.5%
6080 Clerical	\$ 62,429	\$ 65,819	\$ 3,390	5.4%
6200 Line Maintenance	\$ 1,109,259	\$ 1,111,246	\$ 1,987	0.2%
6580 Service Award	\$ 48,635	\$ 39,594	\$ (9,041)	-18.6%
6590 Sick Pay	\$ 25,664	\$ 24,700	\$ (964)	-3.8%
6619 Standby Pay	\$ 36,000	\$ 36,720	\$ 720	2.0%
6620 Overtime	\$ 115,000	\$ 200,000	\$ 85,000	73.9%
6880 Uniform Allowances	\$ 10,980	\$ 10,800	\$ (180)	-1.6%
6885 Device Reimbursements	\$ -	\$ 6,000	\$ 6,000	#DIV/0!
6920 Unemployment Comp. Ins.	\$ 7,560	\$ 6,072	\$ (1,488)	-19.7%
6930 Social Security Taxes	\$ 155,222	\$ 148,437	\$ (6,785)	-4.4%
6940 City Pension Plan	\$ 420,132	\$ 441,280	\$ 21,148	5.0%
6941 Defined Contribution 401(a) Plan	\$ 23,623	\$ 25,206	\$ 1,583	6.7%
6950 Term Life Insurance	\$ 7,992	\$ 7,647	\$ (345)	-4.3%
6960 Group Hospitalization Ins.	\$ 441,941	\$ 451,920	\$ 9,979	2.3%
6961 Long-Term Disability Ins.	\$ 3,916	\$ 3,172	\$ (744)	-19.0%
6962 Dental Insurance	\$ 26,931	\$ 25,198	\$ (1,733)	-6.4%
6963 Flexible Spending Account	\$ 156	\$ 126	\$ (30)	-19.2%
6965 Post-Employment Benefits	\$ 101,170	\$ 98,090	\$ (3,080)	-3.0%
6966 Retirement Health Savings Account	\$ 6,900	\$ 7,000	\$ 100	1.4%
6967 Emergency Room Reimbursements	\$ 3,480	\$ 3,335	\$ (145)	-4.2%
6968 Vision Insurance Premiums	\$ 1,317	\$ 1,284	\$ (33)	-2.5%
Personnel Services Total	\$ 3,289,888	\$ 3,307,058	\$ 17,170	0.5%

**ELECTRIC DEPARTMENT
WAGE AND SALARY BUDGET - 2019**

Title	Union Affiliation	Grade	2018 # of Positions	2018 Approved	2019 # of Positions	2019 Requested	Position Difference	\$ Difference	% Change
FULL TIME POSITIONS									
Director Of Electric	MGMT	34	1.0	\$ 123,750	1.0	\$ 111,126	0.0	\$ (12,624)	-10.2%
Deputy Director Of Electric	MGMT	31	2.0	\$ 202,391	1.0	\$ 108,425	(1.0)	\$ (93,966)	-46.4%
Electric Superintendent	MGMT	22	1.0	\$ 88,157	1.0	\$ 92,893	0.0	\$ 4,736	5.4%
Engineering Tech	CWA F/T	14	1.0	\$ 63,566	1.0	\$ 67,072	0.0	\$ 3,506	5.5%
Purchasing Asst	CWA F/T	13	1.0	\$ 62,429	1.0	\$ 65,819	0.0	\$ 3,390	5.4%
Senior Lineman	AFSCME F/T	19	1.0	\$ 85,537	2.0	\$ 175,307	1.0	\$ 89,770	104.9%
Electric Mtr. Tech.	AFSCME F/T	17	1.0	\$ 81,110	1.0	\$ 84,589	0.0	\$ 3,479	4.3%
Electrician	AFSCME F/T	17	3.0	\$ 230,644	3.0	\$ 244,279	0.0	\$ 13,635	5.9%
Lineman 1st Class	AFSCME F/T	17	6.0	\$ 489,991	5.0	\$ 415,867	(1.0)	\$ (74,124)	-15.1%
Lineman 2nd Class	AFSCME F/T	14	2.0	\$ 139,668	2.0	\$ 142,003	0.0	\$ 2,335	1.7%
Junior Lineman	AFSCME F/T	10	2.0	\$ 119,251	1.0	\$ 56,110	(1.0)	\$ (63,141)	-52.9%
Electric Groundhand	AFSCME F/T	5	2.0	\$ 93,554	3.0	\$ 146,478	1.0	\$ 52,924	56.6%
Storekeeper	AFSCME F/T	8	1.0	\$ 58,451	1.0	\$ 60,509	0.0	\$ 2,058	3.5%
Total Full-Time Positions			24.0	\$ 1,838,499	23.0	\$ 1,770,477	(1.0)	\$ (68,022)	-3.7%
OTHER									
Service Award				\$ 48,635		\$ 39,594		\$ (9,041)	-18.6%
Sick Pay				\$ 25,664		\$ 24,700		\$ (964)	-3.8%
Standby Pay				\$ 36,000		\$ 36,720		\$ 720	2.0%
Overtime				\$ 115,000		\$ 200,000		\$ 85,000	73.9%
Transitional Wages				\$ 14,770		\$ -		\$ (14,770)	-100.0%
Uniform Allowance				\$ 10,980		\$ 10,800		\$ (180)	-1.6%
Device Reimbursements				\$ -		\$ 6,000		\$ 6,000	#DIV/0!
Total Other				\$ 251,049		\$ 317,814		\$ 66,765	26.6%
Total All			24.0	\$ 2,089,548	23.0	\$ 2,088,291	(1.0)	\$ (1,257)	0%

**ELECTRIC DEPARTMENT
FY2019 RECOMMENDED BUDGET
MATERIALS AND SUPPLIES**

Object Level	FY2019 Recommended	\$ Change over FY2018	% Change
Materials/Supplies:	\$303,830	\$6,000	2.0%
Funding for office supplies, safety equipment, tools, streetlights, meter replacements and parts needed to repair or replace existing equipment on the distribution system or in substations.			

Materials/Supplies (Org: 5195103)

Object Line	2018	2019	\$ Difference	% Difference
7110 Safety Shoes and Supplies	\$ 6,300	\$ 6,300	\$ -	0.0%
7130 Tools, Field Sup., & Small Eq.	\$ 39,650	\$ 39,650	\$ -	0.0%
7131 Information Technology Supplies	\$ 30,000	\$ 30,000	\$ -	0.0%
7140 Uniforms	\$ 20,800	\$ 20,800	\$ -	0.0%
7150 Office Supplies	\$ 3,500	\$ 4,500	\$ 1,000	28.6%
7160 Books, Periodicals, Etc	\$ 680	\$ 680	\$ -	0.0%
7260 Line Maintenance	\$ 110,000	\$ 110,000	\$ -	0.0%
7270 Station Maintenance	\$ 45,200	\$ 50,200	\$ 5,000	11.1%
7300 Machinery & Equip. Maintenance	\$ 500	\$ 500	\$ -	0.0%
7330 Meter Testing & Repairs	\$ 2,000	\$ 2,000	\$ -	0.0%
7350 Traffic Signal Maintenance	\$ 950	\$ 950	\$ -	0.0%
7370 Street Light Maintenance	\$ 13,000	\$ 13,000	\$ -	0.0%
7430 House Service Maintenance	\$ 23,500	\$ 23,500	\$ -	0.0%
7480 Communication Equip. Maint.	\$ 500	\$ 500	\$ -	0.0%
7550 Miscellaneous Supplies	\$ 1,250	\$ 1,250	\$ -	0.0%
Materials/Supplies Total	\$ 297,830	\$ 303,830	\$ 6,000	2.0%

MATERIALS AND SUPPLIES DETAIL

Object Code - Description	Amount Requested	Use of Funds (Description)
7110 Safety Shoes and Supplies	\$ 6,300	Safety shoes, glasses, vests, hardhats
7130 Tools, Field Sup., & Small Eq.	\$ 39,650	New and replacement tools, lineman sleeves, gloves and misc items
7131 Information Technology Supplies	\$ 30,000	Proactive maintenance on smart meter wifi-network as well as batteries for 17 gatekeepers
7140 Uniforms	\$ 20,800	OSHA required flame retardent clothing
7150 Office Supplies	\$ 4,500	Paper, pads, plotter paper, pens, pencils etc
7160 Books, Periodicals, Etc	\$ 680	Safety code books and technical books
7260 Line Maintenance	\$ 110,000	Replacement equipment for failed equipment on the distribution system
7270 Station Maintenance	\$ 50,200	Replacement equipment for substation equipment
7300 Machinery & Equip. Maintenance	\$ 500	Parts for tool repairs
7330 Meter Testing & Repairs	\$ 2,000	Material needed for small meter box repairs - lugs, nuts, bolts, latches, replacement cover
7350 Traffic Signal Maintenance	\$ 950	Signal heads, lenses, bulbs, flashers
7370 Street Light Maintenance	\$ 13,000	Replacement heads, bulbs, photocells
7430 House Service Maintenance	\$ 23,500	Replacement meters for failed ones
7480 Communication Equip. Maint.	\$ 500	Antennas, microphones, batteries for radios
7550 Miscellaneous Supplies	\$ 1,250	Miss Utility markout charges
Total	\$ 303,830	

**ELECTRIC DEPARTMENT
FY2019 RECOMMENDED BUDGET
CONTRACTUAL SERVICES**

Object Level	FY2019 Recommended	\$ Change over FY2018	% Change
Contractual Services:	\$1,682,629	\$104,762	6.6%
Funding for outside businesses or contractors to provide insurance, phone service, outside engineering, tree trimming, and maintenance to the distribution system and substation equipment. Increase in credit card and merchant fees due to activity. Outside engineering was increased by \$25,000 due to added contractual work. \$50,000 has been added for a rate study. Annual contribution to Catholic Charities (\$25,000) to assist Newark residents was moved to Subventions (line 9093) to properly classify the expense.			

Contractual Services (Org: 5195104)

Object Line	2018	2019	\$ Difference	% Difference
8010 Freight	\$ 950	\$ 950	\$ -	0.0%
8020 Advertising	\$ 800	\$ 800	\$ -	0.0%
8030 Casualty Insurance	\$ 20,662	\$ 20,665	\$ 3	0.0%
8031 Insurance - Property	\$ 39,444	\$ 39,445	\$ 1	0.0%
8032 Insurance - Auto	\$ 24,990	\$ 24,990	\$ -	0.0%
8033 Insurance - Broker	\$ 7,927	\$ 7,930	\$ 3	0.0%
8040 Merchant Fees and Discounts	\$ 530,000	\$ 590,000	\$ 60,000	11.3%
8050 Phone/Communications	\$ 12,000	\$ 6,000	\$ (6,000)	-50.0%
8120 Outside Engineering	\$ 81,000	\$ 131,000	\$ 50,000	61.7%
8130 Building & Equipment Rental	\$ 14,000	\$ 14,000	\$ -	0.0%
8131 Information Technology Cont'l	\$ 211,954	\$ 239,188	\$ 27,234	12.8%
8190 Refuse Disposal	\$ 2,400	\$ 2,400	\$ -	0.0%
8260 Line Maintenance	\$ 53,200	\$ 53,200	\$ -	0.0%
8270 Station Maintenance	\$ 103,750	\$ 75,000	\$ (28,750)	-27.7%
8300 Machinery & Equip. Maintenance	\$ 8,120	\$ 8,120	\$ -	0.0%
8312 Fleet & Facilities Services	\$ 218,676	\$ 215,947	\$ (2,729)	-1.2%
8420 Tree Removal	\$ 225,000	\$ 230,000	\$ 5,000	2.2%
8480 Communication Equip. Maint.	\$ 1,060	\$ 1,060	\$ -	0.0%
8550 Misc. Contracted Services	\$ 5,000	\$ 5,000	\$ -	0.0%
8570 Public Relations	\$ 14,000	\$ 14,000	\$ -	0.0%
8899 Facilities Mowing	\$ 2,934	\$ 2,934	\$ -	0.0%
Contractual Services Total	\$ 1,577,867	\$ 1,682,629	\$ 104,762	6.6%

**ELECTRIC DEPARTMENT
FY2019 RECOMMENDED BUDGET
CONTRACTUAL SERVICES DETAIL**

Object Code - Description	Amount Requested	Use of Funds (Description)
8010 Freight	\$ 950	Freight charges for delivered and returned items
8020 Advertising	\$ 800	Contract and open position advertising
8030 Casualty Insurance	\$ 20,665	Allocation provided by Finance
8031 Insurance - Property	\$ 39,445	Allocation provided by Finance
8032 Insurance - Auto	\$ 24,990	Allocation provided by Finance
8033 Insurance - Broker	\$ 7,930	Allocation provided by Finance
8040 Merchant Fees and Discounts	\$ 590,000	Credit card fees
8050 Phone/Communications	\$ 6,000	Landline, Cell Phone Stipend and Fax Services
8120 Outside Engineering	\$ 131,000	Wireless facilities attorneys, Arc flash study, Engineering assistance with rates and distribution system issues
8130 Building & Equipment Rental	\$ 14,000	Leases for crossing railroad property with power lines
8131 Information Technology Cont'l	\$ 239,188	Department's share of IT costs, please see Appendix A
8190 Refuse Disposal	\$ 2,400	Disposal of wood debris (utility poles and cross arms)
8260 Line Maintenance	\$ 53,200	Infrared scans of the distribution system, bores needed for underground cable failures, flaggers needed for traffic control while tree trimming or during line maintenance operations
8270 Station Maintenance	\$ 75,000	Yearly electrical testing and oil testing of substation equipment, repairs and maintenance of circuit breakers, yearly substation weed control, Scada repairs, transformer bushing replacements
8300 Machinery & Equip. Maintenance	\$ 8,120	Yearly electrical testing of bucket and line trucks and tool repairs
8312 Fleet & Facilities Services	\$ 215,947	Internal service charges for Fleet & Facilities Maintenance
8420 Tree Removal	\$ 230,000	Tree trimming by Asplundth
8480 Communication Equip. Maint.	\$ 1,060	Repairs for electric department radios
8550 Misc. Contracted Services	\$ 5,000	For unanticipated issues
8570 Public Relations	\$ 14,000	Department's share of PR costs
8899 Facilities Mowing	\$ 2,934	Mowing at Mckees solar park
Total	\$ 1,682,629	

**ELECTRIC DEPARTMENT
FY2019 RECOMMENDED BUDGET
DEPRECIATION**

Object Level	FY2019 Recommended	\$ Change over FY2018	% Change
Depreciation Expense:	\$278,832	\$77,332	38.4%
Depreciation expense is calculated annually by the Department of Finance and is based upon the equipment utilized by each department. This amount will fluctuate depending on asset additions and retirements, cost of assets and useful life of the assets.			

Other Charges (Org: 5195105) - *Depreciation Expense Only

Object Line	2018	2019	\$ Difference	% Difference
9060 Depreciation Expense	\$ 201,500	\$ 278,832	\$ 77,332	38.4%
Other Charges Total *	\$ 201,500	\$ 278,832	\$ 77,332	38.4%

**ELECTRIC DEPARTMENT
FY2019 RECOMMENDED BUDGET
DEBT SERVICE**

Object Level	FY2019 Recommended	\$ Change over FY2018	% Change
Debt Service:	\$620,648	-\$14	0.0%
Costs associated with loans for the smart meter system.			

Other Charges (Org: 5195105) - *Debt Service Only

Object Line	2018	2019	\$ Difference	% Difference
9056 Debt Service Principal-Smart Meters	\$ 533,006	\$ 549,024	\$ 16,018	3.0%
9057 Debt Service Interest-Smart Meters	\$ 87,656	\$ 71,624	\$ (16,032)	-18.3%
Other Charges Total *	\$ 620,662	\$ 620,648	\$ (14)	0.0%

**ELECTRIC DEPARTMENT
FY2019 RECOMMENDED BUDGET
OTHER CHARGES**

Object Level	FY2019 Recommended	\$ Change over FY2018	% Change
Other Charges:	\$354,240	\$109,990	45.0%
Funding for bad debts, training, contingencies. Subvention (9093) includes \$25,000 for Catholic Charities (previously reported under Contractual Services) and \$60,000 for the Newark Senior Center (previously deducted from electric sales revenue).			

Other Charges (Org: 5195105) - *Excluding Depreciation Expense and Debt Service (Principal/Interest)

Object Line	2018	2019	\$ Difference	% Difference
9010 Bad Debt Expense	\$ 93,010	\$ 120,000	\$ 26,990	29.0%
9020 Mileage & Small Bus. Expense	\$ 140	\$ 140	-	0.0%
9070 Training	\$ 15,100	\$ 15,100	-	0.0%
9092 Notional Solar Cost	\$ 26,000	\$ 24,000	\$ (2,000)	-7.7%
9093 Subventions	\$ -	\$ 85,000	\$ 85,000	#DIV/0!
9094 Conservation Advisory Committee	\$ 100,000	\$ 100,000	-	0.0%
9099 Contingencies	\$ 10,000	\$ 10,000	-	0.0%
Other Charges Total *	\$ 244,250	\$ 354,240	\$ 109,990	45.0%

OTHER CHARGES DETAIL

Object Code - Description	Amount Requested	Use of Funds (Description)
9010 Bad Debt Expense	\$ 120,000	Unpaid electric account balances (after 5 years)
9020 Mileage & Small Bus. Expense	\$ 140	Local travel charges
9070 Training	\$ 15,100	Lineman training, code class, PDH's for PE license, CPR, etc
9092 Notional Solar Cost	\$ 24,000	Mckees Solar Park Revenue
9093 Subventions	\$ 85,000	Allocated funds for Catholic Charities (\$25,000) and the Newark Senior Center (\$60,000).
9094 Conservation Advisory Committee	\$ 100,000	Funds available for CAC Designation
9099 Contingencies	\$ 10,000	Unexpected costs
Total	\$ 354,240	

**ELECTRIC DEPARTMENT
FY2019 RECOMMENDED BUDGET
INTER-DEPT. CHARGES**

Object Level	FY2019 Recommended	\$ Change over FY2018	% Change
Inter-Dept. Charges:	\$733,105	\$309,325	73.0%
Administrative Overhead: Allocations of personnel expense from Finance, Planning, Administration, and Legislative for time spent on utility related issues.			
Billings and Accounting: Various costs of the Finance Department are allocated based on pertinent ratios; for example, the payroll function is allocated based on the percentage of equivalent personnel head count (including temporary part-time), accounts payable function is allocated by the percentage of total budget dollars, and the accounting function is allocated by an average of the two previous ratios.			
Electricity: Electricity consumption allocated to the department based on square footage of the department offices compared to the total City Hall building. Meter readings are obtained by the Electric Department at the end of each year. Cost is based on budget DEMEC rate.			
Information Technology: Costs are allocated based on percentage of equivalent personnel head count (including temporary part-time) with the exception of items identified specifically for utility fund items such as support for Harris billing system and smart meter network.			
Other Indirect Charges: Includes charges for work done by other divisions to benefit the receiving division offset by credits for work done by this division for other division. Example: For Parks, the Electric, Street, and Refuse crews performing work for Community Day.			
Printing and Reproduction: The costs of supplies for copiers is allocated based on previously observed percentage of use by each department.			
Street Lights and Traffic Signals: Cost of electricity plus maintenance costs for these devices incurred by the Electric Department charged at 110%.			
Warehousing: Operating costs of the warehouse function allocated to those divisions that store inventory items.			

Inter-Dept. Charges

Object Line	2018	2019	\$ Difference	% Difference
Administrative Overhead	\$ 560,689	\$ 766,531	\$ 205,842	36.7%
Billings and Accounting	\$ 294,327	\$ 438,590	\$ 144,263	49.0%
Electricity	\$ (400,720)	\$ (360,187)	\$ 40,533	-10.1%
Information Technology	\$ 184,076	\$ 78,005	\$ (106,071)	-57.6%
Other Indirect Charges	\$ (17,550)	\$ (24,700)	\$ (7,150)	40.7%
Printing and Reproduction	\$ 182	\$ 182	\$ -	0.0%
Street Lights and Traffic Signals	\$ (176,473)	\$ (143,812)	\$ 32,661	-18.5%
Warehousing	\$ (20,751)	\$ (21,504)	\$ (753)	3.6%
Inter-Dept. Charges Total	\$ 423,780	\$ 733,105	\$ 309,325	73.0%

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CAPITAL IMPROVEMENT PROJECTS (2019 - 2023)

**CITY OF NEWARK
CAPITAL IMPROVEMENTS PROGRAM 2019-2023
ELECTRIC FUND**

Project Number	Project Name	2018 Budget	2019		2019	2020	2021	2022	2023	TOTAL
			Reserves & Other Funding	Current Funding						
E1901	New Lines and Services	\$0	\$0	\$125,000	\$125,000	\$130,000	\$135,000	\$140,000	\$145,000	\$675,000
E1911	34kV Line 3202 Capacity Upgrade	0	0	0	0	0	250,000	250,000	0	500,000
E1912	35kV Disconnect Switches Replacement - Kershaw Substation	0	0	0	0	0	150,000	150,000	150,000	450,000
E1801	New Lines and Services	125,000	0	0	0	0	0	0	0	0
E1804	Spacer Cable Replacement	81,000	0	0	0	0	0	0	0	0
E1805	Line Extension - UD Farm	0	0	170,000	170,000	0	0	0	0	170,000
E1806	Christianstead Cable Addition	0	0	0	0	50,000	0	0	0	50,000
E1807	Relay Replacements - Kershaw Substation	0	0	0	0	50,000	50,000	50,000	50,000	200,000
E1808	Voltage Upgrade - North College Avenue	0	0	0	0	50,000	0	0	0	50,000
E1809	12.47kV Line Extension	0	0	100,000	100,000	0	0	0	0	100,000
E1810	Lightning Arrestor Replacement	0	0	0	0	0	0	0	235,000	235,000
E1602	Circuit Breaker Replacement	0	0	0	0	65,000	0	0	0	65,000
E1502	Underground Distribution - UD Star Campus	120,000	120,000	0	120,000	120,000	120,000	120,000	120,000	600,000
E1203	CAD Software	40,500	40,444	0	40,444	0	0	0	0	40,444
E1105	Upgrade Substation Transformers and Circuit Breakers	700,000	0	0	0	0	0	0	0	0
E0503	SCADA and Automatic Switching	300,000	0	655,000	655,000	250,000	0	450,000	0	1,355,000
EEQSF	Equipment Replacement Program	340,000	291,782	111,218	403,000	302,000	0	0	0	705,000
		<u>\$1,706,500</u>	<u>\$452,226</u>	<u>\$1,161,218</u>	<u>\$1,613,444</u>	<u>\$1,017,000</u>	<u>\$705,000</u>	<u>\$1,160,000</u>	<u>\$700,000</u>	<u>\$5,195,444</u>
	GROSS CAPITAL IMPROVEMENTS	\$1,706,500	\$452,226	\$1,161,218	\$1,613,444	\$1,017,000	\$705,000	\$1,160,000	\$700,000	\$5,195,444
	LESS: USE OF RESERVES	(40,500)	(40,444)	0	(40,444)	0	0	0	0	(40,444)
	VEHICLE/EQUIPMENT REPLACEMENT	(340,000)	(291,782)	0	(291,782)	(248,582)	0	0	0	(540,364)
	GRANTS	0	0	0	0	0	0	0	0	0
	BOND ISSUES	(381,000)	0	0	0	0	0	0	0	0
	OTHER FINANCING SOURCES	(120,000)	(120,000)	0	(120,000)	(120,000)	(120,000)	(120,000)	(120,000)	(600,000)
	NET CAPITAL IMPROVEMENTS	<u>\$825,000</u>	<u>\$0</u>	<u>\$1,161,218</u>	<u>\$1,161,218</u>	<u>\$648,418</u>	<u>\$585,000</u>	<u>\$1,040,000</u>	<u>\$580,000</u>	<u>\$4,014,636</u>



PROJECT NO: E1901
PROJECT TITLE: New Lines and Services
PROJECT STATUS: Reoccurring (with no end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ 675,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 675,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Various location in the City
PROJECT PRIORITY:	1 - Highest Priority Level
	<i>Project underway and must be completed</i>
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	Perpetual
Est. Completion Date:	Perpetual
Est. Useful Life (in years):	30 Yrs.
Est. Total Cost:	\$ 800,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ 125,000
% Complete (if underway):	15.6%
Balance to be funded ¹ :	\$ 675,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 310,500
Materials:	5195106.9760	\$ 364,500
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 675,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:
Installation of electric distribution lines in new developments. This includes both overhead and underground primary and secondary service lines. This project is required based on the obligation to serve new customers in the City.

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES	125,000		125,000	\$ -	125,000	130,000	135,000	140,000	145,000	\$ 675,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ 125,000	\$ -	\$ 125,000	\$ -	\$ 125,000	\$ 130,000	\$ 135,000	\$ 140,000	\$ 145,000	\$ 675,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET					2019	2020	2021	2022	2023	TOTAL
					OPERATING IMPACT:					
					INCREMENTAL COSTS (NET SAVINGS)					\$ -



PROJECT NO: E1911
PROJECT TITLE: 35kV Line 3202 Capacity Upgrade
PROJECT STATUS: New Project

FUNDING SUMMARY:
 NEW FUNDING: \$ 500,000
 CARRYOVER FUNDING: \$ -
 TOTAL FUNDING: \$ 500,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Various Locations in the City
PROJECT PRIORITY:	4 - Medium
<small>This project is a NEED and not a WANT, but no significant risk in the deferral of this item</small>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2019
Est. Completion Date:	2022
Est. Useful Life (in years):	30
Est. Total Cost:	\$ 500,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 500,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 160,000
Materials:	5195106.9760	\$ 340,000
Other Contracts:		
TOTAL PROJECT COST		\$ 500,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
<p>This project will upgrade the aerial and underground cable on 35kV line 3202 to ensure capacity and reliable back-up capacity to the Phillips substation, Chestnut Hill substation, Sandy Brae substation and West Main substation. This upgrade will also allow as to tie this feeder to the new substation in the future if needed.</p>	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -			250,000	250,000		\$ 500,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 250,000	\$ -	\$ 500,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET	OPERATING IMPACT:				2019	2020	2021	2022	2023	TOTAL
	INCREMENTAL COSTS (NET SAVINGS)									\$ -



PROJECT NO: E1912
PROJECT TITLE: 35kV Disconnect Switches Replacement - Kershaw Substation
PROJECT STATUS: New Project

FUNDING SUMMARY:

NEW FUNDING:	\$ 450,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 450,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Kershaw Substation
PROJECT PRIORITY:	3 - Medium-High
<small>The City would be taking a calculated risk in the deferral of this item</small>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2019
Est. Completion Date:	2023
Est. Useful Life (in years):	20
Est. Total Cost:	\$ 450,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 450,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9830	\$ 150,000
Materials:	5195106.9730	\$ 300,000
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 450,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
This project will replace 40 years old 35kV disconnect switches at Kershaw Substation.	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -			150,000	150,000	150,000	\$ 450,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 150,000	\$ 150,000	\$ 450,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET			OPERATING IMPACT:		2019	2020	2021	2022	2023	TOTAL
			INCREMENTAL COSTS (NET SAVINGS)							\$ -



PROJECT NO: E1805
PROJECT TITLE: Line Extension - UD Farm
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:
 NEW FUNDING: \$ 170,000
 CARRYOVER FUNDING: \$ -
 TOTAL FUNDING: \$ 170,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	University of Delaware: Farm
PROJECT PRIORITY:	4 - Medium
This project is a NEED and not a WANT, but no significant risk in the deferral of this item	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2018
Est. Completion Date:	2019
Est. Useful Life (in years):	30
Est. Total Cost:	\$ 170,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 170,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 80,000
Materials:	5195106.9760	\$ 90,000
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 170,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
To ensure capacity and reliable back-up capacity to the Star Campus, the University of Delaware South Campus and City customers on South College Avenue, it is proposed to install a new 12,470 volt circuit from Old South Chapel Street to South College Avenue through the University of Delaware Farm. This project is based on approval from the University of Delaware.	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -	170,000					\$ 170,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ 170,000	\$ -	\$ -	\$ -	\$ -	\$ 170,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET					2019	2020	2021	2022	2023	TOTAL
										\$ -



PROJECT NO: E1806
PROJECT TITLE: Christianstead Underground Primary Cable Addition
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:
 NEW FUNDING: \$ 50,000
 CARRYOVER FUNDING: \$ -
 TOTAL FUNDING: \$ 50,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Christianstead
PROJECT PRIORITY:	4 - Medium
<small>This project is a NEED and not a WANT, but no significant risk in the deferral of this item</small>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2018
Est. Completion Date:	2020
Est. Useful Life (in years):	30
Est. Total Cost:	\$ 50,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 50,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 8,000
Materials:	5195106.9760	\$ 42,000
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 50,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
An additional underground high voltage cable is needed in Christianstead to balance load during emergency condition when an existing high voltage cable fails. When we experience a cable failure, the remaining cable can not be fused properly to coordinate with upstream fuses.	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -		50,000				\$ 50,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET					2019	2020	2021	2022	2023	TOTAL
					OPERATING IMPACT:					
					INCREMENTAL COSTS (NET SAVINGS)					\$ -



PROJECT NO: E1807
PROJECT TITLE: Relay Replacements - Kershaw Substation
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:
 NEW FUNDING: \$ 200,000
 CARRYOVER FUNDING: \$ -
 TOTAL FUNDING: \$ 200,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Kershaw Substation
PROJECT PRIORITY:	5 - Low
<small>This project is a NEED and not a WANT, but it can start in year two of this CIP or later</small>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2018
Est. Completion Date:	2023
Est. Useful Life (in years):	20
Est. Total Cost:	\$ 200,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 200,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 70,000
Materials:	5195106.9760	\$ 130,000
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 200,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
This project will replace electro mechanical relays on circuit breakers 7, 8 and 9 at Kershaw Substation and connect them to the SCADA system. This will allow us to see breaker status and also have remote control.	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -		50,000	50,000	50,000	50,000	\$ 200,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 200,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET					2019	2020	2021	2022	2023	TOTAL
					OPERATING IMPACT:					
					INCREMENTAL COSTS (NET SAVINGS)					\$ -



PROJECT NO: E1808
PROJECT TITLE: Voltage Upgrade - North College Avenue
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ 50,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 50,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	North College Avenue
PROJECT PRIORITY:	5 - Low
<small>This project is a NEED and not a WANT, but it can start in year two of this CIP or later</small>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2018
Est. Completion Date:	2020
Est. Useful Life (in years):	30
Est. Total Cost:	\$ 50,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 50,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 23,800
Materials:	5195106.9760	\$ 26,200
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 50,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:
Replace poles on North College Avenue and install a primary metering pole in preparation for a 4160 volt to 12470 volt upgrade of University buildings on North College Avenue.

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -		50,000				\$ 50,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET	OPERATING IMPACT:				2019	2020	2021	2022	2023	TOTAL
	INCREMENTAL COSTS (NET SAVINGS)									\$ -



PROJECT NO: E1809
PROJECT TITLE: 12.47kV Line Extension
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ 100,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 100,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Christina Parkway
PROJECT PRIORITY:	5 - Low
<small>This project is a NEED and not a WANT, but it can start in year two of this CIP or later</small>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2018
Est. Completion Date:	2019
Est. Useful Life (in years):	30
Est. Total Cost:	\$ 100,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 100,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 61,000
Materials:	5195106.9760	\$ 39,000
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 100,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:
A new 12.47kV line extension is needed for additional capacity and back-up capacity for the Star Campus. This extension will also tie Sandy Brae substation transformer 64 to Chestnut Hill Road transformers 64 and 94 to provide back-up capacity.

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -	100,000					\$ 100,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET			OPERATING IMPACT:		2019	2020	2021	2022	2023	TOTAL
			INCREMENTAL COSTS (NET SAVINGS)							\$ -



PROJECT NO: E1810
PROJECT TITLE: Lightning Arrestor Replacement
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ 235,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 235,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Various
PROJECT PRIORITY:	5 - Low
<small>This project is a NEED and not a WANT, but it can start in year two of this CIP or later</small>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2018
Est. Completion Date:	2023
Est. Useful Life (in years):	30
Est. Total Cost:	\$ 235,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 235,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 180,000
Materials:	5195106.9760	\$ 55,000
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 235,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
Replace older lightning arrestors on the 12.47kV system. This will prevent power outages and improve lightning protection on the distribution system.	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -					235,000	\$ 235,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 235,000	\$ 235,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET					2019	2020	2021	2022	2023	TOTAL
					OPERATING IMPACT:					
					INCREMENTAL COSTS (NET SAVINGS)					\$ -



PROJECT NO: E1602
PROJECT TITLE: Circuit Breaker Replacement
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ 65,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 65,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Fremont Road Substation
PROJECT PRIORITY:	3 - Medium-High
<small>The City would be taking a calculated risk in the deferral of this item</small>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2016
Est. Completion Date:	2020
Est. Useful Life (in years):	30
Est. Total Cost:	\$ 65,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ -
% Complete (if underway):	0.0%
Balance to be funded ¹ :	\$ 65,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9830	\$ 10,000
Materials:	5195106.9730	\$ 40,000
Other Contracts:	5195106.9730	\$ 15,000
TOTAL PROJECT COST		\$ 65,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
The 35kV oil circuit breaker installed in 1975 feeding transformer 47 at the Fremont Road Substation does not always open and close properly. Due to this problem at its age, it is recommended it be replaced with a vacuum type breaker.	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -		65,000				\$ 65,000
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 65,000	\$ -	\$ -	\$ -	\$ 65,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET					2019	2020	2021	2022	2023	TOTAL
					OPERATING IMPACT:					
					INCREMENTAL COSTS (NET SAVINGS)					\$ -



PROJECT NO: E1502
PROJECT TITLE: Underground Distribution - UD Star Campus
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ 600,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 600,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	University of Delaware: Star Campus
PROJECT PRIORITY:	1 - Highest Priority Level
Project underway and must be completed	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2015
Est. Completion Date:	2023
Est. Useful Life (in years):	30
Est. Total Cost:	\$ 720,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ 120,000
% Complete (if underway):	16.7%
Balance to be funded ¹ :	\$ 600,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:		\$ -
Materials:		\$ -
Other Contracts:	5195106.9760	\$ 600,000
TOTAL PROJECT COST		\$ 600,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:
Underground electrical distribution equipment needed for the Star Campus. Expenditures to be reimbursed by the Developer or Customer.

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -						\$ -
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER Developer or Customer	120,000		120,000	\$ -	120,000	120,000	120,000	120,000	120,000	\$ 600,000
TOTAL:	\$ 120,000	\$ -	\$ 120,000	\$ -	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 600,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET			OPERATING IMPACT:		2019	2020	2021	2022	2023	TOTAL
			INCREMENTAL COSTS (NET SAVINGS)							\$ -



PROJECT NO: E1203
PROJECT TITLE: CAD Software
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ -
CARRYOVER FUNDING:	\$ 40,444
TOTAL FUNDING:	\$ 40,444

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Municipal Building
PROJECT PRIORITY:	1 - Highest Priority Level
	<i>Project underway and must be completed</i>
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2012
Est. Completion Date:	2019
Est. Useful Life (in years):	15
Est. Total Cost:	\$ 68,444
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ 28,000
% Complete (if underway):	40.9%
Balance to be funded ¹ :	\$ 40,444

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:		\$ -
Materials:	5195106.9622	\$ 40,444
Other Contracts:		\$ -
TOTAL PROJECT COST		\$ 40,444

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
This software is needed to model the city's electric distribution system. This software has engineering modules to assist in fault calculations, voltage drop calculations, coordination studies and feeder optimization.	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -						\$ -
CAPITAL RESERVES	68,444	28,000		\$ 40,444	40,444					\$ 40,444
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ 68,444	\$ 28,000	\$ -	\$ 40,444	\$ 40,444	\$ -	\$ -	\$ -	\$ -	\$ 40,444
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET	OPERATING IMPACT:				2019	2020	2021	2022	2023	TOTAL
	INCREMENTAL COSTS (NET SAVINGS)									\$ -



PROJECT NO: E0503
PROJECT TITLE: SCADA and Automatic Switching
PROJECT STATUS: In Progress (with end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ 1,355,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 1,355,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Various
PROJECT PRIORITY:	1 - Highest Priority Level
	<i>Project underway and must be completed</i>
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	2005
Est. Completion Date:	2022
Est. Useful Life (in years):	20
Est. Total Cost:	\$ 1,974,896
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ 619,896
% Complete (if underway):	31.4%
Balance to be funded ¹ :	\$ 1,355,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:	5195106.9860	\$ 266,500
Materials:	5195106.9760	\$ 934,500
Other Contracts:	5195106.9960	\$ 154,000
TOTAL PROJECT COST		\$ 1,355,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:
<p>The auto transfer system will allow intelligent transfer of substations on the 34.5kV subtransmission system using reclosers to isolate a faulted circuit and switch a substation to a different circuit if all logic conditions are met. Large outages will be reduced to about a minute and a notification of a transfer will be sent to on call personnel to investigate.</p> <p>Also includes (previous CIP E1802) - 15kV Automatic Switching:</p> <p>This project will add 8 - 15kV reclosers to the existing automation software in 2018 to improve reliability to customers at the Delaware Technology Park and customers on Bellevue Road. The reclosers will automatically isolate a faulted circuit and switch the customers to a different circuit if the alternate circuit is available. In 2019, 11 reclosers will be installed to improve reliability to the UD Center Campus and North Campus. In 2022, 10 reclosers will be installed on South College and the Christina Parkway to improve reliability to the UD South Campus and the Star Campus.</p> <p>Our existing SCADA system has become a legacy system so our SCADA provider has proposed to the City to upgrade our existing SCADA system to a newer platform in order to keep up with the industrial standards.</p>

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -	655,000	250,000		450,000		\$ 1,355,000
CAPITAL RESERVES	619,896	72,385	547,511	\$ -						\$ -
EQUIPMENT REPLACEMENT				\$ -						\$ -
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ 619,896	\$ 72,385	\$ 547,511	\$ -	\$ 655,000	\$ 250,000	\$ -	\$ 450,000	\$ -	\$ 1,355,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET					2019	2020	2021	2022	2023	TOTAL
					OPERATING IMPACT:					
					INCREMENTAL COSTS (NET SAVINGS)					\$ -



PROJECT NO: EEQSF
PROJECT TITLE: Equipment Replacement Program
PROJECT STATUS: Reoccurring (with no end date)

FUNDING SUMMARY:

NEW FUNDING:	\$ 705,000
CARRYOVER FUNDING:	\$ -
TOTAL FUNDING:	\$ 705,000

CAPITAL BUDGET - PROJECT DETAIL	
DEPARTMENT:	Electric
DIVISION:	Electric
FUND:	Electric
PROJECT LOCATION:	Various
PROJECT PRIORITY:	1 - Highest Priority Level
<i>Project underway and must be completed</i>	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

§ 806.1(3) SUMMARY OF PROJECT DATA	
First Year in Program:	Perpetual
Est. Completion Date:	Perpetual
Est. Useful Life (in years):	Various
Est. Total Cost:	\$ 1,045,000
Est. Spend @ 12/31/2018 (if underway) ¹ :	\$ 340,000
% Complete (if underway):	32.5%
Balance to be funded ¹ :	\$ 705,000

¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.

PROJECT COST BY CATEGORY		
CLASSIFICATION	ACCOUNT NUMBER	AMOUNT
Labor:		\$ -
Materials:		\$ -
Other Contracts:	5195106.9623	\$ 705,000
TOTAL PROJECT COST		\$ 705,000

² Council is not required to authorize budget year funding for this portion, but this portion of the project will indeed represent a cash outflow in the budget year and/or "out years."

Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:	
Planned advance funding accumulated through depreciation to replace essential equipment when necessary.	
Please see the attached schedule.	

PROJECT FINANCING BY PLAN YEAR										
§ 806.1(3) SOURCE OF FUNDS:	Prior Authorized ²	Actual Funds Utilized as of 03/31/18	Estimated Expenditures 03/31/18 - 12/31/18	Estimated Authorized Balance ² 12/31/18	2019	2020	2021	2022	2023	TOTAL 5 Year CIP
CURRENT RESOURCES				\$ -	111,218	53,418				\$ 164,636
CAPITAL RESERVES				\$ -						\$ -
EQUIPMENT REPLACEMENT	340,000	60,893	279,107	\$ -	291,782	248,582				\$ 540,364
GRANTS (SPECIFY)				\$ -						\$ -
BOND ISSUES				\$ -						\$ -
STATE REVOLVING LOAN				\$ -						\$ -
OTHER (SPECIFY)				\$ -						\$ -
TOTAL:	\$ 340,000	\$ 60,893	\$ 279,107	\$ -	\$ 403,000	\$ 302,000	\$ -	\$ -	\$ -	\$ 705,000
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET	OPERATING IMPACT:				2019	2020	2021	2022	2023	TOTAL
	INCREMENTAL COSTS (NET SAVINGS)									\$ -

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APPENDICES

**CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
APPENDIX A - OBJECT CODES 7131 AND 8131 (2018 & 2019 BUDGET COMPARISON)**

Code	2019 IT Annual Operating Expenses	2018 Budget	2019 Budget	Over/Under	Description
7131	Smart Meter Equipment Maintenance (including Batteries)	\$ 30,000.00	\$ 30,000.00	\$ -	Proactive maintenance on smart meter wifi-network as well as batteries for 17 gatekeepers
	7131 Subtotal:	\$ 30,000.00	\$ 30,000.00	\$ -	
7131	Actual Budgeted Numbers	\$ 30,000.00	\$ 30,000.00	\$ -	

Code	2019 IT Annual Operating Expenses	2018 Budget	2019 Budget	Over/Under	Description
8131	CYME Software Annual Maintenance (Eaton)	\$ 10,200.00	\$ 10,200.00	\$ -	Electric Outage Simulation Software
8131	Digitalogic - Scada System Licensing - Maintenance	\$ 53,450.00	\$ 56,000.00	\$ 2,550.00	Electric SCADA HMI and Device Licenses
8131	EATON Auto Restoration System Software Maintenance	\$ 15,160.00	\$ 15,160.00	\$ -	Electric Service Auto Restoration Software
8131	Elster License Fee (SLA) Tropos Software Maintenance	\$ 35,000.00	\$ 35,000.00	\$ -	Smart-Meter System (Wireless Infrastructure)
8131	Elster Software Maintenance - EAMS	\$ 13,000.00	\$ 13,000.00	\$ -	Smart-Meter System (Radio Infrastructure)
8131	Elster Upgrade	\$ -	\$ 21,000.00	\$ 21,000.00	Smart-Meter System (Radio Infrastructure) - Upgrade
8131	Esri Small Government ELA	\$ 5,000.00	\$ 5,000.00	\$ -	GIS Server, Client, Cloud Licensing
8131	Harris - Smartworks - Oracle Database Tuning	\$ 7,500.00	\$ 8,200.00	\$ 700.00	Smart Meter System - Proactive Oracle Database Maintenance
8131	Harris - Smartworks Software Maintenance	\$ 12,500.00	\$ 12,750.00	\$ 250.00	Smart-Meter System (Middleware)
8131	Harris - NorthStar Annual Maintenance	\$ 35,000.00	\$ 36,900.00	\$ 1,900.00	Utility Billing Software (including Smart-Meter System)
8131	Oracle Software Subscription Renewal (Not Harris)	\$ 2,500.00	\$ 2,500.00	\$ -	Smart Meter - Oracle Database Software License
8131	PowerLine Technology SagLine Software	\$ 1,000.00	\$ 1,000.00	\$ -	Electrical Engineering Utility Weight and Span Software
8131	Redhat Software Maintenance	\$ -	\$ 1,250.00	\$ 1,250.00	Smart Meter - Linux Operating System for Servers
8131	Tyler Technologies Munis Annual Maintenance	\$ 7,614.39	\$ 8,743.54	\$ 1,129.15	Tyler Technologies Munis - Finance and Accounting, Taxes, Permitting, Licenses, Work Order Management
8131	Verizon - Cellular/Data	\$ 10,500.00	\$ 7,700.00	\$ (2,800.00)	Computer Mobile Internet Connectivity
8131	VOIP Networks - Cloud9 VOIP Subscription	\$ 3,529.41	\$ 3,472.22	\$ (57.19)	VOIP Phone System
8131	Canon Financial - Copier Lease	\$ -	\$ 1,311.75	\$ 1,311.75	Canon Copier Leases
	8131 Subtotal:	\$ 211,953.80	\$ 239,187.51	\$ 27,233.71	
8131	Actual Budgeted Numbers	\$ 211,954.00	\$ 239,188.00	\$ 27,234.00	

CITY OF NEWARK, DELAWARE
ELECTRIC DEPARTMENT
DOCUMENT VERSION CONTROL

Date:	Version:	Description of Change(s):
8/20/18	1	Initial Submission (Version 1)