

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

RATE FILING

**BASED ON THE YEAR ENDED MAY 31, 2022 (BASE YEAR)
FORECAST PERIOD FEBRUARY 1, 2023 (EFFECTIVE DATE
OF RATE INCREASE) TO JANUARY 31, 2024
Issued August 29, 2022**

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

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FORECAST PERIOD FEBRUARY 1, 2023 (EFFECTIVE DATE
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**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

**FORECASTED STATEMENT OF OPERATIONS
Based on the Year Ended May 31 , 2022 (Base Year)**

	Base Year May 31, 2022	Normalizing Adjustments	Adjusted Base Year	Rate Year Adjustments	Normalized Rate Year Before Revenue Increase	Revenue Increase Request	Rate Year After Increase	Note Reference
Revenues								
Operating revenues - Base	\$ 545,913	\$ (1,384)	\$ 544,529	\$ -	\$ 544,529	\$ 128,159	\$ 672,688	1
Operating revenues - PPAC	103,334	(988)	102,346	(578)	101,768	-	101,768	1
Operating revenues - Clean Energy Standards (CES)	55,861	(255)	55,606	-	55,606	-	55,606	1
Late charges	5,462	812	6,274	-	6,274	-	6,274	1
Miscellaneous operating revenues	3,215	(1,743)	1,472	-	1,472	-	1,472	1
Total revenues	<u>713,785</u>	<u>(3,558)</u>	<u>710,227</u>	<u>(578)</u>	<u>709,649</u>	<u>128,159</u>	<u>837,808</u>	
Expenses								
Purchased power, and related costs	385,234	(840)	384,394	-	384,394	-	384,394	2.a.
Labor, net of capitalized labor	102,030	-	102,030	10,886	112,916	-	112,916	2.b.1
FICA, medical, retirement, workers' compensation, etc.	51,572	-	51,572	1,335	52,907	-	52,907	2.b.2
Contractual/material expenses								
Maintenance of poles and fixtures	-	-	-	-	-	-	-	2.b.3
Distribution	37,808	-	37,808	(8,111)	29,697	-	29,697	2.b.3
Street lights	130	-	130	594	724	-	724	2.b.3
Consumer accounting and collection	3,939	-	3,939	67	4,006	-	4,006	2.b.3
Sales expense	-	-	-	-	-	-	-	2.b.3
Administrative and general	59,466	-	59,466	2,961	62,427	-	62,427	2.b.3
Insurance	6,840	-	6,840	210	7,050	-	7,050	2.b.4
Uncollectible accounts	2,074	-	2,074	4,075	6,149	-	6,149	2.b.5
Depreciation	40,489	-	40,489	12,481	52,970	-	52,970	2.b.6
Rent	9,980	-	9,980	34,636	44,616	-	44,616	2.b.7
PILOT to Village of Philadelphia	-	-	-	7,100	7,100	-	7,100	2.b.7
Amortization of rate filing costs	-	-	-	8,333	8,333	-	8,333	2.b.9
Contractual appropriations of income - IEEP	10,881	-	10,881	(578)	10,303	-	10,303	2.b.8
Total expenses	<u>710,443</u>	<u>(840)</u>	<u>709,603</u>	<u>73,989</u>	<u>783,592</u>	<u>-</u>	<u>783,592</u>	
Operating income (loss) (*)	<u>\$ 3,342</u>	<u>\$ (2,718)</u>	<u>\$ 624</u>	<u>\$ (74,567)</u>	<u>\$ (73,943)</u>	<u>\$ 128,159</u>	<u>\$ 54,216</u>	
Rate Base	<u>\$ 1,122,487</u>				<u>\$ 1,327,550</u>		<u>\$ 1,327,550</u>	
Rate of Return	<u>0.30%</u>				<u>-5.57%</u>		<u>4.08%</u>	
Return on Surplus	<u>0.30%</u>				<u>-7.03%</u>		<u>4.37%</u>	

(*) Operating income does not include interest income or interest expense.

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

SUMMARY OF NORMALIZATION AND RATE YEAR ADJUSTMENTS

Base Year Normalization Adjustments

a) Operating revenues	
Weather normalization (decrease) of Base revenues	\$ (1,384)
b) To reflect decrease in purchased power due to revenue weather normalization	(585)
c) To adjust PPAC revenues for over billing in Fiscal Year 2022	(988)
d) To adjust CES revenues due to weather normalization (decrease in kWh sold)	(255)
e) To adjust cost of CES charges, due to weather normalization	(255)
f) To adjust late charge revenues to equal three year average (as a % of gross sales)	812
g) To adjust miscellaneous revenues to equal three year average (2020 through 2022)	(1,743)
	<hr/>
Total normalization adjustments	\$ (2,718)

Rate Year Adjustments

h) To decrease IEEP contributions as a result of weather normalization	\$ (578)
i) To decrease PPAC revenues due to decrease in IEEP contributions	(578)
j) To reflect "net" increase in expensed labor dollars due to anticipated wage increases, net of amounts to be allocated to capital accounts	10,886
k) To reflect net changes in employee benefits due to payroll tax calculation or allocated budget amounts for shared employee benefit costs	1,335
l) <u>Contractual/material expenses</u>	
Distribution - 3 year average	(8,111)
Street lights - 3 year average	594
Consumer accounting and collection - 3 year average	67
Administrative and general - 3 year average	2,961
m) To reflect increase in general liability insurance based on 3 year average	210
n) To reflect anticipated increase in uncollectible accounts receivable, based on 3 year average	4,075
o) To reflect increase in annual depreciation expense, as the result of anticipated capital improvements to be made during the period June 1, 2022 through January 31, 2024 (linking period and rate year)	12,481
p) To reflect PILOT payment to the Village of Philadelphia	7,100
q) To reflect increase in rent expense related to occupancy of new building	34,636
r) To reflect amortization of rate filing costs over 3 year period of benefit	8,333
	<hr/>
Total Rate Year Adjustments	\$ 74,567

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

**FORECASTED RATE OF RETURN CALCULATION
CAPITALIZATION MATRIX**

Based on the Year Ended May 31, 2022

Adjusted for Rate Year Adjustments and Revenue Increase Request

		<u>Amount</u>	<u>Percent</u>	<u>Cost Rate</u>	<u>Rate of Return</u>
<u>2022 (Base Year)</u>					
Long-term debt	Exhibit 10	\$ 2,563	0.2%	2.65%	0.01%
Customer deposits	Exhibit 10	34,404	2.8%	0.00%	0.00%
Net surplus	Exhibit 10	<u>1,205,200</u>	<u>97.0%</u>	0.30%	<u>0.29%</u>
Total		<u>\$ 1,242,167</u>	<u>100.00%</u>		<u>0.30%</u>
<u>Rate Year Before Revenue Increase</u>					
Long-term debt	Exhibit 10	\$ 163,294	12.8%	3.00%	0.39%
Customer deposits	Exhibit 10	32,456	2.6%	0.00%	0.00%
Net surplus	Exhibit 10	<u>1,075,626</u>	<u>84.6%</u>	-6.79%	<u>-5.96%</u>
Total		<u>\$ 1,271,376</u>	<u>100.00%</u>		<u>-5.57%</u>
<u>Rate Year After Revenue Increase</u>					
Long-term debt	Exhibit 10	\$ 163,294	12.8%	3.00%	0.39%
Customer deposits	Exhibit 10	32,456	2.6%	0.00%	0.00%
Net surplus	Exhibit 10	<u>1,075,626</u>	<u>84.6%</u>	4.37%	<u>3.69%</u>
Total		<u>\$ 1,271,376</u>	<u>100.00%</u>		<u>4.08%</u>

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT****SUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)****NOTE 1 - OPERATING REVENUES***Base Revenues*

Base revenues of the Village of Philadelphia - Electric Department (Department), include base revenues from the Residential, Commercial, Industrial, Public Street Lighting, Other Lighting and Security Lighting rate classes.

Customer consumption (in kWh) and related Base Revenues in the Rate Year were calculated using weather normalization formulas discussed in Workpaper A. Weather normalization trends were developed using information included in the NYSERDA website (<https://www.nyserda.ny.gov/About/Publications/EA-Reports-and-Studies/Weather-Data/Monthly-Cooling-and-Heating-Degree-Day-Data>) for heating degree days for the ten (10) year period 2012 - 2022. This data was specific to the Watertown, New York area. The weather normalization model used in this rate filing, was previously provided by the State of New York Department of Public Service, for use in prior municipal electric rate filings with that office.

As the Department experienced minimal growth/decline in its customer base over the last six years (fiscal years 2017 through 2022), any impact on Base Revenues, as a result of customer growth or decline, has been ignored in this forecast. The total number of customers serviced during this six-year period ranged from a low of 700 (2021) to a high of 714 (2019). The number of customers serviced during the Base Year (2022) was 705.

Based on the weather normalization calculations described in Workpaper A, Base Revenues during the Rate Year are expected to decrease \$1,384 (0.25% decrease) from the Base Year.

PPAC Revenues

PPAC Revenues represent a “dollar-for-dollar” pass-through of incremental power costs (defined as power costs and other production costs in excess of base purchased power costs). This “dollar-for-dollar” pass-through is reconciled at the end of each fiscal year to identify if any over billing or under billing of PPAC revenues had occurred during the fiscal period. For the fiscal year ended May 31, 2022 (Base Year), the Department over billed its customers \$988 in PPAC revenues (see Workpaper E). This over billing will be returned to the Department’s customers via the PPAC process during the fiscal year ending May 31, 2023. As such, PPAC revenues were decreased by \$988 as a normalization adjustment in the Rate Year.

In addition, PPAC revenues include certain other costs that are passed onto the customer as part of the PPAC process. The Department currently bills its customers at a rate of .001/kWh for its contributions to the Independent Energy Efficiency Program (IEEP). All PPAC revenues collected from these billings are remitted to the IEEP for energy efficiency projects, and the revenues generated and the expenses incurred under this program do not enter into the determination of the Department’s net operating income. As such, they are considered “revenue neutral.”

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 1 - OPERATING REVENUES - Continued

PPAC Revenues - Continued

Forecasted revenues generated by this process are based on kWh sold. As kWh consumption is expected to decrease during the Rate Year (due to weather normalization described above), PPAC revenues related to this process are also expected to decrease. As such, PPAC revenues have been decreased by \$578. Conversely, contributions to the IEEP (classified as an expense) have also been decreased by \$578 to remain “revenue neutral” in the determination of net operating income. Information related to this adjustment are as follows:

	<u>kWh sold</u>	<u>IEEP Contributions</u>	<u>Effective Rate/kWH</u>
Base Year	10,349,723	\$ 10,881	0.001051
Rate Year	<u>10,303,149</u>	<u>10,303</u>	0.001000
Adjustment	<u>(46,574)</u>	<u>\$ (578)</u>	

Note: Rate Year kWh sold considers a 0.45% decrease in consumption based on weather normalization

CES Revenues

The Department bills its customers for charges related to the Clean Energy Standards (CES) as a separate line item on the customer’s bill (and not through the PPAC process). These customer charges (CES revenues) are equal to the CES charges paid to. As such, these transactions are “revenue neutral” in the determination of net operating income. See further discussion in “Purchased Power” below. CES revenues for the Base Year, totaled \$55,861, which were equal to CES related costs. Due to the anticipated decrease in kWh sold (due to weather normalization previously described), CES revenues are expected to decrease \$255, from Base Year amounts, as follows:

	<u>kWh sold</u>	<u>CES Revenues</u>	<u>Effective Rate/kWH</u>
Base Year	10,349,723	55,861	0.005397
Rate Year	<u>10,303,149</u>	<u>55,606</u>	0.005397
Adjustment	<u>(46,574)</u>	<u>(255)</u>	

Note: Rate Year kWh sold considers a 0.45% decrease in consumption based on weather normalization.

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 1 - OPERATING REVENUES - Continued

Base Revenue, Revenue Increase Rate

Increase in Base Revenues (as a result of an approximately 23.5% increase in base rates effective February 1, 2023) requested herein to support operations, capital improvements, annual debt service, establish adequate cash balances, and provide a reasonable rate of return on Rate Base, is expected to total \$128,159. Base Revenues in the Rate Year are expected to be \$672,688 (versus normalized Base Year revenues of \$544,529).

Other Revenues

Other revenues consist of late charges and miscellaneous electric revenues. These revenue sources, in general, are normally of an insignificant amount (as compared to total revenues) and can be quite volatile from year to year.

Due to COVID-19 pandemic protocols, late charges were not assessed during fiscal year 2021, and a portion of fiscal year 2022 (Base Year). As COVID-19 protocols have been released, late charges are expected to return to "pre-pandemic" levels. As such, late charges are expected to equal the three-year average (2017-2019) of late charges to gross electric billings (as a percentage). This average percentage of 0.89% multiplied by normalized gross electric billings before the requested revenue increase reflects late charges of \$6,274 in the Rate Year, as described below:

<u>Fiscal Year</u>	<u>Gross Electric Revenues</u>	<u>Late Charges</u>	<u>%</u>
May 31, 2017 (a)	\$ 590,722	\$ 5,682	0.96%
May 31, 2018 (a)	614,786	5,519	0.90%
May 31, 2019 (a)	<u>636,044</u>	<u>5,245</u>	<u>0.82%</u>
Total	<u>\$ 1,841,552</u>	<u>\$ 16,446</u>	<u>0.89%</u>
<u>Normalized Gross Revenues</u>			
Rate Year	\$ 702,481		
x late charge %	<u>0.89%</u>		
Late charges - Rate Year	<u>6,274</u>		
Late charges - Base Year	<u>-</u>		
Increase in Rate Year	<u>\$ 6,274</u>		

Note: Gross Electric Revenues include Base revenues, PPAC revenues and CES revenues

(a) No late charges were assessed during COVID pandemic period. (Fiscal years before COVID were used)

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 1 - OPERATING REVENUES - Continued

Other Revenues- Continued

Miscellaneous revenues can be quite volatile from year to year. Miscellaneous revenues in the Rate Year are expected to equal the three-year average (Years 2020 through 2022) of these revenue sources. Miscellaneous electric revenues are expected to total \$1,472 during the Rate Year, as follows:

Fiscal Year	Miscellaneous Revenue
May 31, 2020	\$ 247
May 31, 2021	955
May 31, 2022	3,215
	<hr/>
Total	\$ 4,417
	<hr/>
Rate Year - Forecasted (3 year average)	\$ 1,472
	<hr/>

NOTE 2 - OPERATING EXPENSES

a. Purchased Power - The Electric Department includes in its purchased power, the following items:

- Hydropower charges (billed by the New York Power Authority)
- Supplemental power (billed by the New York Municipal Power Agency)*
- Transmission costs (billed by NYSEG)
- Transmission Congestion Contracts (also known as TCC's)

The cost of electricity purchased for distribution is forecasted to be \$384,394 during the Rate Year. This forecasted amount is based on: (a) actual purchased power costs incurred during the Base Year, adjusted for weather normalization calculations described in Workpaper A, and (b) a decrease in CES charges, as a result of weather normalization. As weather normalization is expected to decrease consumption and Base Revenues (Note 1), purchased power is also expected to decrease to meet those consumption needs. Decreases in purchased power, due to weather normalization adjustments, is expected to be \$585 (Workpaper A). Decreases in purchased power due to decreased CES charges (due to weather normalization) is expected to decrease \$255.

* - *Supplemental power costs include CES charges. CES charges in the Base Year totaled \$55,861 and were equal to CES billed to customers.*

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 2 - OPERATING EXPENSES - Continued

b. Other Operating Expenses - Other operating expenses are adjusted as follows:

(1) Labor (charged to expense accounts)

Labor charged to expense accounts include:

- Salaries of the line crew laborers (allocated via the work order system based on the work performed).*
- Salaries of the Superintendent*, Clerk-Treasurer, Deputy Clerk, Mayor and Trustees (allocated to the Electric Department based on estimated level of effort).

Total salaries to be incurred during the Rate Year are projected to be \$122,416, of which \$9,500 will be capitalized to operating property, and \$112,916 will be expensed in the forecasted statement of operations. (See Exhibit 15 for capitalized salaries).

The slight change in total salaries (\$10,500) is solely due to wage increases that went into effect on June 1, 2022 and expected to go into effect on June 1, 2023. See Workpapers E and E-1 for forecasted Rate Year labor and Base Year (2022) labor.

** - Line crew laborers, as well as the Superintendent, are considered "shared" employees, as they all perform work for the Village's Electric, Water, Sewer and DPW Departments. As such, the salaries of Line crew laborers and the Superintendent, have been allocated to the Electric Department during the Rate Year using a 4-year average (2019-2022) of their actual allocations to the Electric Department.*

(2) Employee Benefits

Employee benefits include medical/dental insurance, workers' compensation, New York State retirement contributions and FICA. Costs in Base Year 2022, represent the Electric Department's share of actual invoiced amounts (or via calculation on labor dollars for FICA), and is primarily based on a ratio of Electric Department labor dollars to total Village of Philadelphia labor dollars.

Amounts reported as NYS Retirement expense in fiscal year 2022 (Base Year) include an amount to recognize the change in retirement expense related to GASB No. 68, *Net Pension Liability*. As the net pension liability is not considered for ratemaking purposes, the effect of GASB No. 68 has been removed from this rate filing. As such, an adjustment has been made in this rate filing to increase NYS Retirement expense by \$2,006 (the net change in the Net Pension Liability reported in Fiscal Year 2022).

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 2 - OPERATING EXPENSES - Continued

b. Other Operating Expenses - Other operating expenses are adjusted as follows - Continued

(2) Employee Benefits - Continued

Rate Year employee benefit costs are based on (1) actual invoiced amounts or insurance carrier quotes, (2) calculation (FICA), or (3) budgeted amounts based on historic trend. Rate Year employee benefit costs are expected to be approximately 49% of total labor dollars. Net increase in employee benefits costs is expected to be as follows:

Type	Base Year 2022	Rate Year	Rate Year Increase (Decrease)
Medical/Dental insurance (a)	\$ 40,584	\$ 39,162	\$ (1,422)
NYS retirement (b)	9,624	11,045	1,421
GASB 68 expense (income)	(2,006)	-	2,006
Workers' compensation (c)	1,350	1,348	(2)
FICA (d)	9,162	9,365	203
Less: Allocation of benefits (e)	(7,142)	(8,013)	(871)
	<u>\$ 51,572</u>	<u>\$ 52,907</u>	<u>\$ 1,335</u>

- (a) Medical insurance, which includes dental coverage, is based on quoted premiums from the Village's insurance providers. These premiums have been included in the Village's entity-wide budgets and have been allocated to the Electric Department based on level of effort within the Department.
- (b) In general, retirement costs have remained fairly consistent over the past 3-5 years. The costs reported in the Rate Year are expected to be similar to the retirement contributions made in December 2021, as required by the New York State Retirement System. Retirement cost included in the Rate Year is based on tier percentages provided to the Village by OSC, multiplied by the projected salary of each employee (based on level of effort within the Department). As described above, the NYS Retirement cost presented in the Rate Year does not include any effect of GASB No. 68.
- (c) Workers' compensation premiums are expected to remain relatively flat based on the Village's overall claim experience. Total Village-wide workers' compensation premiums have been allocated to the Electric Department based on level of effort within the Department.
- (d) FICA is calculated at 7.65% of total gross salaries.

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 2 - OPERATING EXPENSES - Continued

b. Other Operating Expenses - Other operating expenses are adjusted as follows - Continued

(2) Employee Benefits - Continued

- (e) Via the Department's work order system, employee benefits are allocated to capital or expense accounts based on the work performed by the line crew. This allocation is achieved through the use of an employee benefits overhead rate multiplied by direct labor dollars. Once the work orders are processed and accounted for, the capital accounts or expense accounts are "burdened" with these costs, and as such, a reduction of gross employee benefit costs is appropriate.

(3) Contractual/Material Expenses

Contractual and material expenses consist of materials, supplies, and/or services provided by outside vendors which are charged to the distribution, street lights, consumer accounting and administrative and general cost categories. These costs also include the allocation of truck overhead costs, employee benefit and supervision overhead costs and stores overhead costs as processed through the Department's work orders for these types of tasks.

During the Rate Year, these costs are expected to equal the three-year average (2020-2022) of these categories (see Workpaper C).

	Base Year 2022	Rate Year	Rate Year Increase (Decrease)
Maintenance of poles	\$ -	\$ -	\$ -
Distribution	37,808	29,697	(8,111)
Street lights	130	724	594
Consumer accounting	3,939	4,006	67
Sales expense	-	-	-
Administrative and general	59,466	62,427	2,961

(4) Insurance

Insurance expense represents the Electric Department's share of general property and liability insurance. Village premiums, allocated to the Electric Department during the Rate Year, are expected to equal the 3-year (2020-2022) average of these allocated premiums, as follows:

Rate Year anticipated amount	\$ 7,050
Base Year 2022 amounts	<u>6,840</u>
Rate Year increase	<u><u>\$ 210</u></u>

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 2 - OPERATING EXPENSES - Continued

- b. Other Operating Expenses - Other operating expenses are adjusted as follows - Continued

(5) Uncollectible Accounts

The Electric Department has had reasonably good results in its collection of customer receivables. Uncollectible accounts in the Fiscal Year 2021 were slightly elevated due to collections issues related to the COVID-19 pandemic and its related protocols. Uncollectible accounts during the Rate Year are expected to equal the three-year average (2020-2022), as a percent of gross normalized electric billings. This average percentage of 0.88% multiplied by normalized gross electric billings before the revenue increase reflects uncollectible accounts of \$6,149 in the Rate Year, as described below:

Fiscal Year	Gross Revenues	Uncollectible Accounts	%
May 31, 2020	\$ 590,722	\$ 1,675	0.28%
May 31, 2021	614,786	12,371	2.01%
May 31, 2022	636,044	2,074	0.33%
Total	<u>\$ 1,841,552</u>	<u>\$ 16,120</u>	<u>0.88%</u>
<u>Normalized Gross Revenues</u>			
Rate Year	\$ 702,481		
x Uncollectible %	0.88%		
Uncollectible Accounts - Rate Year	6,149		
Uncollectible Accounts - Base Year	2,074		
Increase in Rate Year	<u>\$ 4,075</u>		

(6) Depreciation Expense

Depreciation expense (Exhibit 14) has been calculated based on existing operating property plus (1) net operating property additions for the period June 1, 2022 to January 31, 2023 (known as the "linking" period), plus (2) future operating property acquisitions detailed in Exhibit 15. Future operating property acquisitions include anticipated costs for contractor, material, capitalized labor, employee benefits and supervision overhead costs, material overhead, and truck overhead. Future operating property acquisitions are reported "net" of anticipated retirement values.

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 2 - OPERATING EXPENSES - Continued

b. Other Operating Expenses - Continued

(6) Depreciation Expense - Continued

Depreciation charges are calculated using rates that are consistent with rates used in prior years, as approved by the PSC in the Department's last rate filing. Depreciation charges are calculated on operating property balances, net of any contributed amounts, as required.

Depreciation expense, Rate Year	\$ 52,970
Depreciation expense, Base Year	<u>40,489</u>
Rate Year increase	<u><u>\$ 12,481</u></u>

(7) Rent and PILOT to the Village of Philadelphia

Rent

During Fiscal Year 2022 (Base Year), the Department paid rent totaling \$9,980 to the Village's General Fund for its pro-rata share of its office space at Village Hall, as well as an outlying building used for its stock supplies, warehouse and garage.

Recently, the Village purchased a new building that will house its administrative and operational offices. After the purchase of this property, the Village commenced significant construction and renovation projects to bring the building into a viable space for Village needs.

To finance these construction projects, the Village intends to issue a 15-year Serial Bond in the amount of \$1,995,580. Terms of the bond will include annual principal payments and semi-annual interest payment at rates ranging from 3.250% to 4.500%. The bond is expected to mature in Fiscal Year 2038. Annual debt service payments will range from \$177,761 to \$182,600.

As the Village's General Fund will own the building and related renovations, the General Fund will charge the Electric Department an annual rent expense equal to 25% of the annual debt service on the bond. The General Fund will also charge the Village's Water and Sewer Departments an equal share of the annual debt service. As such, the four operating departments of the Village, will be equally responsible for meeting the required annual debt service payments.

Required debt service during the Rate Year is equal to \$178,464. The Electric Department's 25% share of this cost is \$44,616 and is considered rent expense. As noted above, annual debt service requirements in subsequent years is similar to the Rate Year.

The Electric Fund will continue to use the warehouse and garage space in the former building at no charge.

PILOT to the Village of Philadelphia

As part of this Rate Filing, the Department wishes to make a Payment in Lieu of Taxes (PILOT) to the Village's General Fund, which will be recovered through future Base Rates and related Base revenues.

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTSUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 2 - OPERATING EXPENSES - Continued

b. Other Operating Expenses - Continued

(7) Rent and PILOT to the Village of Philadelphia - Continued

PILOT to the Village of Philadelphia - Continued

Based on the experience of other municipal electric utilities located in New York State, a PILOT has been established based on the net book value of certain operating property located within the municipality, multiplied by the municipality's current property tax rate (adjusted for the current equalization rate). Based on this model, the Department has calculated a projected PILOT based on the Rate Year net book value of its operating property located within the Village of Philadelphia boundaries. The PILOT amount, as calculated is \$7,100 (rounded). These calculations can be seen in Workpaper F to this Rate Filing.

(8) Contractual Appropriations of Income - IEEP Contributions

The Department participates in the Independent Energy Efficiency Program (IEEP) to offer programs and make capital improvements to promote energy efficiency by and for its customers. As previously described, contributions to the IEEP are based on kWh sold multiplied by .001 per kWh. Expected kWh sold in the Rate Year, due to weather normalization is expected to approximate 10,303,149 kWh, which calls for a \$10,303 contribution to the IEEP during the Rate Year. These costs and related revenues (recovered by the PPAC process) are "revenue neutral" to the operations of the Department. This represents a \$578 decrease from the Base Year 2022 and is solely due to an anticipated decrease in kWh consumption due to weather normalization.

(9) Amortization of Rate Filing Costs

The Department wishes to amortize the cost of its rate filing over a three-year period, the expected period of benefit. The Department estimates the cost of the rate filing to be \$25,000. Amortization costs are expected to be \$8,333 per annum for each of the next three years.

NOTE 3 - INDEBTEDNESS

The Electric Department's indebtedness at the end of the Rate Year consists of an anticipated borrowing related to the acquisition of a bucket truck.

A summary of indebtedness at the end of the Rate Year is as follows:

Serial Bond, issued January 2024, interest at 3.0%,
due January 2029

\$ 326,588

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

SUMMARY OF SIGNIFICANT FORECAST ASSUMPTIONS
Based on the Year Ended May 31, 2022 (Base Year)

NOTE 4 - RATE OF RETURN

The rate of return calculation is provided as an indicator of the level of forecasted income from operations compared to the risk/investment borne by the Electric Department.

The rate of return on Rate Base and Surplus for the year ended May 31, 2022, is calculated based on the prescribed format in the Village's Municipal Electric Utilities Annual Report filed with the New York State Department of Public Service for the year ended May 31, 2022. These rates of return were 0.30% and 0.30% respectively. The rate of return for the Forecasted Rate Year of 4.08% is calculated using Base Year 2022 amounts and applying forecasted changes to the Electric Department's operation, rate base, debt service, and surplus, as described herein. The Village of Philadelphia does not have a bond rating.

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

BALANCE SHEETS

	Fiscal 2020	Fiscal 2021	Fiscal 2022	2021-2022 Average Balance
ASSETS				
Plant in service	\$ 2,246,932	\$ 2,284,472	\$ 2,323,248	\$ 2,303,860
Construction work in progress	-	-	-	-
Non-operating property	-	-	-	-
Depreciation and amortization reserve	(1,134,870)	(1,172,882)	(1,236,800)	(1,204,841)
Contribution for extensions	(111,138)	(111,138)	(111,138)	(111,138)
Net plant	<u>1,000,924</u>	<u>1,000,452</u>	<u>975,310</u>	<u>987,881</u>
Depreciation reserve cash funds	-	-	-	-
Miscellaneous special cash funds	-	-	-	-
Cash	237,315	227,451	285,822	256,637
Working funds	400	400	400	400
Loans to operating Municipality	-	-	-	-
Materials and supplies	61,048	69,613	64,230	66,922
Receivables from operating municipalities	1,894	2,030	1,288	1,659
Accounts receivable	66,787	79,330	76,512	77,921
Reserve for uncollectibles	(7,400)	(11,500)	(13,500)	(12,500)
Prepayments	-	-	-	-
Miscellaneous current assets	-	-	-	-
Deferred outflows - GASB 68	60,122	60,122	75,299	67,711
Total assets	<u>\$ 1,421,090</u>	<u>\$ 1,427,898</u>	<u>\$ 1,465,361</u>	<u>\$ 1,446,630</u>
LIABILITIES				
Accounts payable	21,509	23,977	20,223	22,100
Payables to operating Municipality	36,983	79,970	133,864	106,917
Customer deposits	36,402	36,351	32,456	34,404
Taxes accrued	750	2,547	2,711	2,629
Interest accrued	-	-	-	-
Miscellaneous other current liabilities	5,034	5,034	5,180	5,107
Total current liabilities	<u>100,678</u>	<u>147,879</u>	<u>194,434</u>	<u>171,157</u>
Bonds and Loans payable	-	3,375	1,750	2,563
Reserves	-	-	-	-
Net Pension Liability - GASB 68	99,951	99,951	379	50,165
Deferred Inflows - GASB 68	4,018	4,018	113,842	58,930
Total liabilities	<u>204,647</u>	<u>255,223</u>	<u>310,405</u>	<u>282,814</u>
Contributions to municipality	(778,141)	(799,576)	(820,569)	(810,073)
Surplus	1,994,584	1,972,251	1,975,525	1,973,888
Total surplus	<u>1,216,443</u>	<u>1,172,675</u>	<u>1,154,956</u>	<u>1,163,816</u>
Total liabilities and surplus	<u>\$ 1,421,090</u>	<u>\$ 1,427,898</u>	<u>\$ 1,465,361</u>	<u>\$ 1,446,630</u>

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

**INCOME STATEMENTS
(INCLUDING kWh SALES BY RATE CLASS)**

	Fiscal 2020	Fiscal 2021	Fiscal 2022	Three Year Average
Operating revenues				
A/C 601 Residential sales	\$ 421,370	\$ 468,882	\$ 510,813	\$ 467,022
A/C 602 Commercial sales	26,861	27,604	27,344	27,270
A/C 603 Industrial sales	66,994	69,257	71,593	69,281
A/C 604 Public street lighting - operating municipality	8,966	9,364	9,382	9,237
A/C 605 Public Street lighting - other	-	-	-	-
A/C 606 Other sales to operating municipality	34,519	37,283	35,082	35,628
A/C 607 Other sales to other public authorities	179	186	167	177
A/C 608 Sales to other distributors	-	-	-	-
A/C 610 Security lighting	314	328	328	323
A/C 621 Rent from electric property	-	-	-	-
A/C 622 CES revenues	39,845	43,728	55,861	46,478
A/C 622 Miscellaneous electric revenues	247	955	3,215	1,472
Total operating revenues	<u>599,295</u>	<u>657,587</u>	<u>713,785</u>	<u>656,889</u>
Operation and maintenance expense				
Electricity purchased	304,390	370,208	385,234	353,277
Transmission expense	-	-	-	-
Poles, towers and fixtures	-	-	-	-
Distribution expense	60,651	44,267	75,873	60,264
Street lighting and signal expense	3,267	933	261	1,487
Customer accounting and collection	7,696	8,782	7,904	8,127
Sales expense	-	-	-	-
Administrative and general expense	213,460	193,738	187,727	198,308
Miscellaneous expense transferred	-	-	-	-
Depreciation	39,485	40,009	40,489	39,994
Taxes - electric	-	-	-	-
Uncollectible revenues	1,675	12,371	2,074	5,373
Total operation and maintenance expense	<u>630,624</u>	<u>670,308</u>	<u>699,562</u>	<u>666,831</u>
Income (loss) from operations	<u>(31,329)</u>	<u>(12,721)</u>	<u>14,223</u>	<u>(9,942)</u>
Other income (expense)				
Interest income	2	-	-	1
Interest expense	-	(100)	(68)	(56)
Contractual appropriations of income	(9,223)	(9,512)	(10,881)	(9,872)
Miscellaneous interest deductions	-	-	-	-
Other	-	-	-	-
Total other income (expense)	<u>(9,221)</u>	<u>(9,612)</u>	<u>(10,949)</u>	<u>(9,927)</u>
Net Income (loss)	<u>\$ (40,550)</u>	<u>\$ (22,333)</u>	<u>\$ 3,274</u>	<u>\$ (19,870)</u>
kWh Sales				
A/C 601 Residential sales	6,955,591	7,293,550	7,717,540	7,322,227
A/C 602 Commercial sales	395,276	390,932	380,970	389,059
A/C 603 Industrial sales	1,563,369	1,429,078	1,449,050	1,480,499
A/C 604 Public street lighting - operating municipality	78,043	79,464	79,673	79,060
A/C 605 Public street lighting - other	-	-	-	-
A/C 606 Other sales to operating municipality	784,931	730,413	717,210	744,185
A/C 607 Other sales to other public authorities	2,160	2,160	2,160	2,160
A/C 609 Sales to HDL Customers	-	-	-	-
A/C 610 Security lighting	3,120	3,120	3,120	3,120
Total kWh sold	<u>9,782,490</u>	<u>9,928,717</u>	<u>10,349,723</u>	<u>10,020,310</u>

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

STATEMENTS OF SURPLUS

	Fiscal 2020	Fiscal 2021	Fiscal 2022
BALANCE, <i>beginning of year</i>	\$ 1,277,740	\$ 1,216,443	\$ 1,172,675
Add:			
Net income (loss)	(40,550)	(22,333)	3,274
Deduct:			
Contributions to municipality	(20,747)	(21,435)	(20,993)
BALANCE, <i>end of year</i>	<u>\$ 1,216,443</u>	<u>\$ 1,172,675</u>	<u>\$ 1,154,956</u>

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

RATE OF RETURN STUDY

RATE BASE

Based on the Year Ended May 31, 2022 (Base Year)

		(a)	(b)	(c)	(d)	(e)	
		Fiscal		Adjusted	Revenue	Year After	
	<u>Reference (Page, Column, Row)</u>	<u>Year</u>	<u>Adjustments</u>	<u>Year</u>	<u>Change</u>	<u>Revenue</u> <u>Change</u>	
35	Utility Plant in Service	RB, Ln 5 (c)	\$ 2,303,860	\$ 185,728	\$ 2,489,588	\$ -	\$ 2,489,588
36	Construction Work in Progress	RB, Ln 8 (c)	-	-	-	-	-
37	Total Utility Plant	ROR, Ln 35 plus Ln 36	2,303,860	185,728	2,489,588	-	2,489,588
38							
39	Accumulated Provision for Depre and Amort	RB, Ln 14 (c)	(1,204,841)	(4,777)	(1,209,618)	-	(1,209,618)
40							
41	Contributions for Extensions	RB, Ln 17 (c)	(111,138)	-	(111,138)	-	(111,138)
42							
43	Net Utility Plant	ROR, Total Ln 37, Ln 39, Ln 41	987,881	180,951	1,168,832	-	1,168,832
44							
45	Materials and Supplies	RB, Ln 21 (c)	66,922	(2,692)	64,230	-	64,230
46							
47	Prepayments (including prepaid rate filing costs)	RB, Ln 24 (c)	-	20,834	20,834	-	20,834
48							
49	Cash Working Capital	ROR, Ln 74	67,434	6,222	73,655	N/A	73,655
50							
51	<u>Other: (Detail)</u>						
52							
53							
54							
55							
56	Rate Base	ROR, Total Ln 43=>Ln 54	\$ 1,122,237	\$ 205,314	\$ 1,327,550	\$ -	\$ 1,327,550

**VILLAGE OF PHILADLEPHIA
ELECTRIC DEPARTMENT**

**RATE OF RETURN STUDY
CASH WORKING CAPITAL
Based on the Year Ended May 31, 2022 (Base Year)**

		(a)	(b)	(c)	(d)	(e)
	Reference (Page, Column, Row)	Fiscal Year	Adjustments	Adjusted Year	Revenue Change	Year After Revenue Change
57 <u>Cash Working Capital</u>						
58 Total Operating Expenses	ROR, Ln 22	\$ 710,443	\$ 73,149	\$ 783,592	\$ -	\$ 783,592
59						
60 Deduct:						
61 Fuel	ROR, Ln 6	-	-	-	N/A	-
62 Purchased Power	ROR, Ln 7	385,234	(840)	384,394	N/A	384,394
63 Depreciation	ROR, Ln 16	40,489	12,481	52,970	N/A	52,970
64 Other Taxes	ROR, Ln 17	-	7,100	7,100	N/A	7,100
65 Uncollectibles	ROR, Ln 18	2,074	4,075	6,149	N/A	6,149
66						
67						
68 Adjusted Amount	ROR, Ln 58 minus Ln 61=>Ln 67	282,646	50,333	332,979	-	332,979
69						
70 Working Capital - Operating Expenses @ 1/8	ROR, Ln 68/8	35,331	6,292	41,622	N/A	41,622
71						
72 Working Capital - Purchased Power @ 1/12	ROR, Ln 61/12	32,103	(70)	32,033	N/A	32,033
73						
74 Total Cash Working Capital	ROR, Total Ln 70, Ln 72	\$ 67,434	\$ 6,222	\$ 73,655	N/A	\$ 73,655

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

**DETAIL OF RATE BASE
Based on the Year Ended May 31, 2022 (Base Year)**

		(a)	(b)	(c)	(d)	(e)	(f)	
	Reference (Page, Column, Row)	Balance at Beg of Year	Balance at End of Year	Avg Balance	Bal. At Beg. of Rate Year	Bal. At End of Rate Year	Avg. Balance	
1	<u>Utility Plant in Service</u>							
2	Operating Property - Electric	Pg 104, Ln 2 (c) & (d)	\$ 2,284,472	\$ 2,323,248	\$ 2,303,860	\$ 2,341,054	\$ 2,638,121	\$ 2,489,588
3	Operating Property - Other Operations	Pg 104, Ln 3 (c) & (d)	-	-	-	-	-	-
4	Operating Property - General	Pg 104, Ln 4 (c) & (d)	-	-	-	-	-	-
5	Utility Plant in Service		<u>\$ 2,284,472</u>	<u>\$ 2,323,248</u>	<u>\$ 2,303,860</u>	<u>\$ 2,341,054</u>	<u>\$ 2,638,121</u>	<u>\$ 2,489,588</u>
6								
7								
8	Construction Work in Progress	Pg 104, Ln 5 (c) & (d)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
9								
10								
11	<u>Accumulated Provision for Depre and Amort</u>							
12	Accumulated Provision for Depreciation	Pg 105, Ln 19 (c) & (d)	\$ 1,172,882	\$ 1,236,800	\$ 1,204,841	\$ 1,289,143	\$ 1,130,093	\$ 1,209,618
13	Accumulated Provision for Amortization	Pg 105, Ln 20 (c) & (d)	-	-	-	-	-	-
14	Accumulated Provision for Depre and Amort		<u>\$ 1,172,882</u>	<u>\$ 1,236,800</u>	<u>\$ 1,204,841</u>	<u>\$ 1,289,143</u>	<u>\$ 1,130,093</u>	<u>\$ 1,209,618</u>
15								
16								
17	Contributions for Extensions	Pg 105, Ln 21 (c) & (d)	<u>\$ 111,138</u>	<u>\$ 111,138</u>	<u>\$ 111,138</u>	<u>\$ 111,138</u>	<u>\$ 111,138</u>	<u>\$ 111,138</u>
18								
19								
21	Materials and Supplies	Pg 104, Ln 18 (c) & (d)	<u>69,613</u>	<u>64,230</u>	<u>\$ 66,922</u>	<u>\$ 64,230</u>	<u>\$ 64,230</u>	<u>\$ 64,230</u>
22								
23								
24	Prepayments (including prepaid rate filing costs)	Pg 104, Ln 23 (c) & (d)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 25,000</u>	<u>\$ 16,667</u>	<u>\$ 20,834</u>

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

**DETAIL OF RATE OF RETURN
Based on the Year Ended May 31, 2022 (Base Year)**

		(a) Balance at Beg of Year	(b) Balance at End of Year	(c) Avg Balance	(d) Bal. At Beg. of Rate Year	(e) Bal. At End of Rate Year	(f) Avg. Balance
Capital Structure	Reference (Page, Column, Row)						
<u>Debt</u>							
Bonds	Pg 105, Ln 2 (c) & (d)	\$ 3,375	\$ 1,750	\$ 2,563	\$ -	\$ 326,588	\$ 163,294
Equipment Obligations - Long-Term	Pg 105, Ln 3 (c) & (d)	-	-	-	-	-	-
Miscellaneous Long-Term Debt	Pg 105, Ln 4 (c) & (d)	-	-	-	-	-	-
Notes Payable	Pg 105, Ln 9 (c) & (d)	-	-	-	-	-	-
Matured Long-Term Debt	Pg 105, Ln 12 (c) & (d)	-	-	-	-	-	-
Unamortized Premium on Debt	Pg 105, Ln 28 (c) & (d)	-	-	-	-	-	-
Unamortized Debt Discount and Expense	Pg 104, Ln 28 (c) & (d)	-	-	-	-	-	-
Debt		\$ 3,375	\$ 1,750	\$ 2,563	\$ -	\$ 326,588	\$ 163,294
Customer Deposits	Pg 105, Ln 10 (c) & (d)	\$ 36,351	\$ 32,456	\$ 34,404	\$ 32,456	\$ 32,456	\$ 32,456
<u>Surplus</u>							
Contributions - Operating Municipality	Pg 105, Ln 32 (c) & (d)	\$ (799,576)	\$ (820,569)	\$ (810,073)	\$ (820,569)	\$ (841,569)	\$ (831,069)
Surplus	Pg 105, Ln 33 (c) & (d)	1,972,251	1,975,525	1,973,888	1,903,690	1,831,855	1,867,773
Balance Sheet effect of GASB 68	Pg 104, Ln 37 (c) & (d)	43,847	38,922	41,385	38,922	38,922	38,922
Surplus		\$ 1,216,522	\$ 1,193,878	\$ 1,205,200	\$ 1,122,043	\$ 1,029,208	\$ 1,075,626
Interest Costs							
<u>Interest on Debt</u>							
Bonds	Pg 252, Ln 20 (k)						\$ 4,899
Equipment Obligations - Long-Term	Pg 252, Ln 28 (k)			68			-
Miscellaneous Long Term-Debt	Pg 252, Ln 35 (k)			-			-
Notes Payable	Pg 250, Ln 22 (g)			-			-
Matured Long-Term Debt	N/A			-			-
Unamortized Premium on Debt (Credit)	Pg 106, Ln 36 (c)			-			-
Amortization of Debt Discount and Expense	Pg 106, Ln 35 (c)			-			-
							-
Interest on Debt				\$ 68			\$ 4,899
Cost Rate				2.65%			3.00%
Interest on Customer Deposits	Pg 309, Ln 10 (f)			\$ -			\$ -
Cost Rate				0.00%			0.00%

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

**REVENUE CHANGE
For the Historic Year Ended May 31, 2022
and the Rate Year**

	<u>Reference (Page, Column, Row)</u>	<u>Amount</u>	
106 Rate Base	ROR, Ln 30 (e)	1,327,550	
107			
108 Rate of Return	ROR, Ln 32 (e)	4.00%	
109			
110 Required Operating Income	ROR, Ln 106 * Ln 108	53,102	
111			
112 Adjusted Operating Income	ROR, Ln 28 (c)	(73,943)	
113			
114 Deficiency (Surplus)	ROR, Ln 110 - Ln 112	127,045	
115			
116 Retention Factor	ROR, Ln 132	0.9913	
117			
118 Revenue Increase (Decrease)	ROR, Ln 114 / Ln 116	128,159	
119			
120			
121			
122 Calculation of the Retention Factor:		<u>Factor</u>	<u>Proof</u>
123 Sales Revenues		1.0000	128,159
124 - Revenue Taxes	N/A	N/A	N/A
125 - Uncollectibles	ROR, Ln 18/Ln 1	0.0087	1,114
126			
127			
128 Sub-Total	ROR, Ln 123-Total Ln 124=>Ln 127	0.9913	127,045
129			
130 Federal Income Tax @ 35%	N/A	0.00	0
131			
132 Retention Factor	ROR, Ln 128 - Ln 130	0.9913	127,045

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

**CALCULATION OF AVERAGE LINE LOSS AND FACTOR OF ADJUSTMENT
Based on Line Losses for Fiscal Years 2017 Through 2022**

	kWh Purchases	kWh Line Losses	Annual Line Loss	kWh Electric Dept. Use	kWh Sales
Fiscal Year 2017	10,275,632	227,895	0.022178	-	10,047,737
Fiscal Year 2018	10,600,979	310,529	0.029292	-	10,290,450
Fiscal Year 2019	10,462,213	299,652	0.028641	-	10,162,561
Fiscal Year 2020	10,074,290	291,800	0.028965	-	9,782,490
Fiscal Year 2021	10,238,671	309,954	0.030273	-	9,928,717
Fiscal Year 2022	10,731,008	381,285	0.035531	-	10,349,723
	<u>62,382,793</u>	<u>1,821,115</u>		<u>-</u>	<u>60,561,678</u>
Average Line Loss			<u>0.029193</u>		

	kWh Purchases	kWh Sales	Annual Factor Of Adjustment
Fiscal Year 2017	10,275,632	10,047,737	1.022681
Fiscal Year 2018	10,600,979	10,290,450	1.030176
Fiscal Year 2019	10,462,213	10,162,561	1.029486
Fiscal Year 2020	10,074,290	9,782,490	1.029829
Fiscal Year 2021	10,238,671	9,928,717	1.031218
Fiscal Year 2022	10,731,008	10,349,723	1.036840
	<u>62,382,793</u>	<u>60,561,678</u>	
Average Factor of Adjustment			<u>1.030070</u>

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COMPARISON OF PRESENT AND PROPOSED RATES

	<u>Present</u>	<u>Proposed</u>	<u>Increase \$</u>	<u>Increase %</u>
<u>S.C. No. 1</u>				
Customer Charge	\$ 3.27	\$ 4.04	\$ 0.77	23.54%
Non-Winter Rate (May through October) Energy charge, per kWh	\$ 0.0481	\$ 0.0594	\$ 0.0113	23.54%
Winter Rate (November through April) Energy charge, per kWh				
first 1,000 kWh	\$ 0.0481	\$ 0.0594	\$ 0.0113	23.54%
over 1,000 kWh	\$ 0.0620	\$ 0.0766	\$ 0.0146	23.54%
<u>S.C. No. 2</u>				
Customer Charge	\$ 3.82	\$ 4.72	\$ 0.90	23.54%
Non-Winter Rate (May through October) Energy charge, per kWh	\$ 0.0535	\$ 0.0661	\$ 0.0126	23.54%
Winter Rate (November through April) Energy charge, per kWh	\$ 0.0623	\$ 0.0770	\$ 0.0147	23.54%
<u>S.C. No. 3</u>				
Demand Charge, per kW	\$ 4.91	\$ 6.07	\$ 1.16	23.54%
Energy Charge, per kWh	\$ 0.0231	\$ 0.0285	\$ 0.0054	23.54%
<u>S.C. No. 4</u>				
Facilities Charge, per Lamp	\$ 3.71	\$ 4.58	\$ 0.87	23.54%
Energy Charge, per kWh	\$ 0.0402	\$ 0.0497	\$ 0.01	23.54%
<u>S.C. No. 5</u>				
Facilities Charge, per Lamp	\$ 3.16	\$ 3.90	\$ 0.74	23.54%
Energy Charge, per kWh	\$ 0.0402	\$ 0.0497	\$ 0.0095	23.54%

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COMPARISON OF MONTHLY BILLS

S.C. No. 1 - RESIDENTIAL (MAY - OCTOBER)

<u>kWh</u>	<u>Present</u>	<u>Proposed</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
0	\$ 3.27	\$ 4.04	\$ 0.77	23.55%
2	\$ 3.39	\$ 4.18	\$ 0.79	23.41%
10	\$ 3.85	\$ 4.73	\$ 0.88	22.93%
25	\$ 4.72	\$ 5.77	\$ 1.05	22.29%
50	\$ 6.17	\$ 7.51	\$ 1.34	21.62%
75	\$ 7.63	\$ 9.24	\$ 1.62	21.21%
100	\$ 9.08	\$ 10.98	\$ 1.90	20.93%
150	\$ 11.98	\$ 14.45	\$ 2.47	20.57%
200	\$ 14.89	\$ 17.92	\$ 3.03	20.35%
250	\$ 17.79	\$ 21.39	\$ 3.60	20.21%
500	\$ 32.31	\$ 38.73	\$ 6.42	19.87%
750	\$ 46.83	\$ 56.08	\$ 9.25	19.74%
1,000	\$ 61.35	\$ 73.42	\$ 12.07	19.67%
1,500	\$ 90.40	\$ 108.12	\$ 17.72	19.60%
2,000	\$ 119.44	\$ 142.81	\$ 23.37	19.57%
5,000	\$ 293.69	\$ 350.96	\$ 57.27	19.50%
PPA/kWh include.*	0.009984	0.009984		

* = PPAC factor in effect during Rate Year (equivalent to average PPAC Factor in Base Year)

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT
COMPARISON OF MONTHLY BILLS**

S.C. No. 1 - RESIDENTIAL (NOVEMBER - APRIL)

<u>kWh</u>	<u>Present</u>	<u>Proposed</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
0	\$ 3.27	\$ 4.04	\$ 0.77	23.55%
2	\$ 3.39	\$ 4.18	\$ 0.79	23.41%
10	\$ 3.85	\$ 4.73	\$ 0.88	22.93%
25	\$ 4.72	\$ 5.77	\$ 1.05	22.29%
50	\$ 6.17	\$ 7.51	\$ 1.34	21.62%
75	\$ 7.63	\$ 9.24	\$ 1.62	21.21%
100	\$ 9.08	\$ 10.98	\$ 1.90	20.93%
150	\$ 11.98	\$ 14.45	\$ 2.47	20.57%
200	\$ 14.89	\$ 17.92	\$ 3.03	20.35%
250	\$ 17.79	\$ 21.39	\$ 3.60	20.21%
500	\$ 32.31	\$ 38.73	\$ 6.42	19.87%
750	\$ 46.83	\$ 56.08	\$ 9.25	19.74%
1,000	\$ 61.35	\$ 73.42	\$ 12.07	19.67%
1,500	\$ 97.35	\$ 116.72	\$ 19.37	19.90%
2,000	\$ 133.34	\$ 160.01	\$ 26.67	20.00%
5,000	\$ 349.29	\$ 419.76	\$ 70.47	20.18%
PPA/kWh include.*	0.009984	0.009984		

* = PPAC factor in effect during Rate Year (equivalent to average PPAC Factor in Base Year)

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT
COMPARISON OF MONTHLY BILLS**

S.C. No. 2 - GENERAL SERVICE - NON-DEMAND METERED (MAY - OCTOBER)

<u>kWh</u>	<u>Present</u>	<u>Proposed</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
0	\$ 3.82	\$ 4.72	\$ 0.90	23.56%
2	\$ 3.95	\$ 4.87	\$ 0.93	23.44%
10	\$ 4.45	\$ 5.48	\$ 1.03	23.03%
25	\$ 5.41	\$ 6.62	\$ 1.22	22.47%
50	\$ 6.99	\$ 8.52	\$ 1.53	21.88%
75	\$ 8.58	\$ 10.43	\$ 1.85	21.50%
100	\$ 10.17	\$ 12.33	\$ 2.16	21.24%
150	\$ 13.34	\$ 16.13	\$ 2.79	20.91%
200	\$ 16.52	\$ 19.94	\$ 3.42	20.71%
250	\$ 19.69	\$ 23.74	\$ 4.05	20.57%
500	\$ 35.56	\$ 42.76	\$ 7.20	20.25%
750	\$ 51.43	\$ 61.78	\$ 10.35	20.12%
1,000	\$ 67.30	\$ 80.80	\$ 13.50	20.06%
1,500	\$ 99.05	\$ 118.85	\$ 19.80	19.99%
2,000	\$ 130.79	\$ 156.89	\$ 26.10	19.96%
5,000	\$ 321.24	\$ 385.14	\$ 63.90	19.89%
10,000	\$ 638.66	\$ 765.56	\$ 126.90	19.87%
PPA/kWh include.*	0.009984	0.009984		

* = PPAC factor in effect during Rate Year (equivalent to average PPAC Factor in Base Year)

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT
COMPARISON OF MONTHLY BILLS**

S.C. No. 2 - GENERAL SERVICE - NON-DEMAND METERED (NOVEMBER - APRIL)

<u>kWh</u>	<u>Present</u>	<u>Proposed</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
0	\$ 3.82	\$ 4.72	\$ 0.90	23.56%
2	\$ 3.96	\$ 4.89	\$ 0.93	23.40%
10	\$ 4.54	\$ 5.58	\$ 1.04	22.85%
25	\$ 5.63	\$ 6.87	\$ 1.25	22.13%
50	\$ 7.43	\$ 9.02	\$ 1.59	21.39%
75	\$ 9.24	\$ 11.18	\$ 1.94	20.94%
100	\$ 11.05	\$ 13.33	\$ 2.28	20.64%
150	\$ 14.66	\$ 17.63	\$ 2.97	20.26%
200	\$ 18.28	\$ 21.94	\$ 3.66	20.03%
250	\$ 21.89	\$ 26.24	\$ 4.35	19.87%
500	\$ 39.96	\$ 47.76	\$ 7.80	19.52%
750	\$ 58.03	\$ 69.28	\$ 11.25	19.39%
1,000	\$ 76.10	\$ 90.80	\$ 14.70	19.32%
1,500	\$ 112.25	\$ 133.85	\$ 21.60	19.24%
2,000	\$ 148.39	\$ 176.89	\$ 28.50	19.21%
5,000	\$ 365.24	\$ 435.14	\$ 69.90	19.14%
PPA/kWh include.*	0.009984	0.009984		

* = PPAC factor in effect during Rate Year (equivalent to average PPAC Factor in Base Year)

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT
COMPARISON OF MONTHLY BILLS**

S.C. No. 3 - GENERAL SERVICE - DEMAND METERED

<u>kW</u>	<u>kWh</u>	<u>Present</u>	<u>Proposed</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
50	1,000	\$ 278.58	\$ 341.98	\$ 63.40	22.76%
	1,500	\$ 295.13	\$ 361.23	\$ 66.10	22.40%
	2,000	\$ 311.67	\$ 380.47	\$ 68.80	22.07%
75	2,000	\$ 434.42	\$ 532.22	\$ 97.80	22.51%
	3,000	\$ 467.50	\$ 570.70	\$ 103.20	22.07%
	4,000	\$ 500.59	\$ 609.19	\$ 108.60	21.69%
100	5,000	\$ 656.42	\$ 799.42	\$ 143.00	21.78%
	7,500	\$ 739.13	\$ 895.63	\$ 156.50	21.17%
	10,000	\$ 821.84	\$ 991.84	\$ 170.00	20.69%
PPA/kWh include.*		0.009984	0.009984		

* = PPAC factor in effect during Rate Year (equivalent to average PPAC Factor in Base Year)

S.C. No. 4 - PRIVATE OUTDOOR LIGHTING

<u>kWh</u>	<u>Present</u>	<u>Proposed</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
100	\$ 8.73	\$ 10.55	\$ 1.82	20.85%
200	\$ 13.75	\$ 16.52	\$ 2.77	20.15%
500	\$ 28.80	\$ 34.42	\$ 5.62	19.51%
PPA/kWh include:	0.009984	0.009984		

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT
COMPARISON OF MONTHLY BILLS**

S.C. No. 5 - STREET LIGHTING

<u>kWh</u>	<u>Present</u>	<u>Proposed</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
100	\$ 8.18	\$ 9.87	\$ 1.69	20.66%
200	\$ 13.20	\$ 15.84	\$ 2.64	20.00%
500	\$ 28.25	\$ 33.74	\$ 5.49	19.43%

PPA/kWh include.* 0.009984 0.009984

* = PPAC factor in effect during Rate Year (equivalent to average PPAC Factor in Base Year)

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTOPERATING PROPERTY ANALYSIS,
Including Additions and Depreciation Calculations
Linking Period Through Rate Year

A/C#	5/31/22 Beg of Yr. Bal.	Estimated Additions, net of Retirements 6/1/2022 to 1/31/2023	Projected 1/31/23 End of Period Bal	Rate Year Forecasted Additions	Rate Year Forecasted Retirements	Projected 1/31/24 End of Rate Yr. Bal
301	\$ 177	\$ -	\$ 177	\$ -	\$ -	\$ 177
302	-	-	-	-	-	-
303	-	-	-	-	-	-
311	269	-	269	-	-	269
312	78,396	-	78,396	-	-	78,396
321	-	-	-	-	-	-
322	-	-	-	-	-	-
323	-	-	-	-	-	-
325	-	-	-	-	-	-
331	-	-	-	-	-	-
332	-	-	-	-	-	-
333	-	-	-	-	-	-
334	-	-	-	-	-	-
342	-	-	-	-	-	-
344	-	-	-	-	-	-
345	-	-	-	-	-	-
351	-	-	-	-	-	-
352	-	-	-	-	-	-
353	-	-	-	-	-	-
354	-	-	-	-	-	-
358	302,997	4,455	307,452	81,050	(21,600)	366,902
359	-	-	-	-	-	-
361	732,430	-	732,430	47,900	(8,700)	771,630
362	-	-	-	-	-	-
363	193,630	2,973	196,603	5,150	-	201,753
364	84,570	522	85,092	4,000	-	89,092
365	218,568	5,121	223,689	1,150	-	224,839
366	73,416	951	74,367	1,150	-	75,517
367	-	-	-	-	-	-
368	88,002	1,377	89,379	7,900	-	97,279
369	1,645	-	1,645	-	-	1,645
370	4,227	-	4,227	-	-	4,227
371	59,596	2,408	62,004	22,220	(6,350)	77,874
381	21,739	-	21,739	-	-	21,739
382	10	-	10	-	-	10
383	267	-	267	-	-	267
384	372,974	-	372,974	326,588	(209,876)	489,686
385	-	-	-	-	-	-
386	12,878	-	12,878	-	-	12,878
387	77,457	-	77,457	46,485	-	123,942
388	-	-	-	-	-	-
391	-	-	-	-	-	-
392	-	-	-	-	-	-
393	-	-	-	-	-	-
	<u>\$ 2,323,248</u>	<u>\$ 17,806</u>	<u>\$ 2,341,054</u>	<u>\$ 543,593</u>	<u>\$ (246,526)</u>	<u>\$ 2,638,121</u>

(a)

(a) - Includes capitalized salaries, materials, engineering, contracted and related overheads.

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTDEPRECIATION CALCULATIONS
Linking Period Year Ended January 31, 2023

A/C#	5/31/22 Beg of Yr. Bal.	1/31/2023 End of Period Bal.	Avg. Gross Bal.	Less: Contributions for Extension	Avg. Balance Subject to Depreciation	Dep. Rate	Depreciation Reserves				1/31/2023 End of Period Bal.	Remaining Cost
							Depreciation Expense A/C#	Amt. (A)	Beg of Yr. Bal.	(Retirements) Salvage		
301	\$ 177	\$ 177	\$ 177	\$ -	\$ 177	-		\$ -	\$ -	\$ -	\$ -	\$ 177
302	-	-	-	-	-	-		-	-	-	-	-
303	-	-	-	-	-	-		-	-	-	-	-
311	269	269	269	-	269	-	743 & 788	-	-	-	-	269
312	78,396	78,396	78,396	-	78,396	1.77%	738	925	44,985	-	45,910	32,486
321	-	-	-	-	-	-		-	-	-	-	-
322	-	-	-	-	-	-		-	-	-	-	-
323	-	-	-	-	-	-		-	-	-	-	-
325	-	-	-	-	-	-		-	-	-	-	-
331	-	-	-	-	-	-	711	-	-	-	-	-
332	-	-	-	-	-	-	711	-	-	-	-	-
333	-	-	-	-	-	-	711	-	-	-	-	-
334	-	-	-	-	-	-	711	-	-	-	-	-
342	-	-	-	-	-	-	717	-	-	-	-	-
344	-	-	-	-	-	-	717	-	-	-	-	-
345	-	-	-	-	-	-	717	-	-	-	-	-
351	-	-	-	-	-	-	733	-	-	-	-	-
352	-	-	-	-	-	-	733	-	-	-	-	-
353	-	-	-	-	-	-	738	-	-	-	-	-
354	-	-	-	-	-	-	733	-	-	-	-	-
358	302,997	307,452	305,225	(32,698)	272,527	3.11%	738	5,650	119,784	-	125,434	182,018
359	-	-	-	-	-	-	738	-	-	-	-	-
361	732,430	732,430	732,430	(76,841)	655,589	2.08%	743	9,091	490,614	-	499,705	232,725
362	-	-	-	-	-	-	743	-	-	-	-	-
363	193,630	196,603	195,117	(1,599)	193,518	1.80%	743	2,322	24,466	-	26,788	169,815
364	84,570	85,092	84,831	-	84,831	1.80%	743	1,018	32,234	-	33,252	51,840
365	218,568	223,689	221,129	-	221,129	2.31%	743	3,405	91,976	-	95,381	128,308
366	73,416	74,367	73,892	-	73,892	2.09%	743	1,030	1,030	-	2,060	72,307
367	-	-	-	-	-	-	743	-	-	-	-	-
368	88,002	89,379	88,690	-	88,690	3.33%	743	1,969	45,570	-	47,539	41,840
369	1,645	1,645	1,645	-	1,645	3.33%	743	37	1,505	-	1,542	103
370	4,227	4,227	4,227	-	4,227	2.25%	743	63	(95)	-	(32)	4,259
371	59,596	62,004	60,800	-	60,800	2.25%	753	912	(3,743)	-	(2,831)	64,835
381	21,739	21,739	21,739	-	21,739	4.00%	788	580	23,873	-	24,453	(2,714)
382	10	10	10	-	10	-	788	-	10	-	10	-
383	267	267	267	-	267	-	788	-	267	-	267	-
384	372,974	372,974	372,974	-	372,974	8.00%	804	19,892	317,810	-	337,702	35,272
385	-	-	-	-	-	-	788	-	-	-	-	-
386	12,878	12,878	12,878	-	12,878	3.32%	788	285	9,289	-	9,574	3,304
387	77,457	77,457	77,457	-	77,457	10.00%	743	5,164	37,225	-	42,389	35,068
388	-	-	-	-	-	-	788	-	-	-	-	-
391	-	-	-	-	-	-	788	-	-	-	-	-
	<u>\$ 2,323,248</u>	<u>\$ 2,341,054</u>	<u>\$ 2,332,151</u>	<u>\$ (111,138)</u>	<u>\$ 2,221,013</u>			<u>\$ 52,343</u>	<u>\$ 1,236,800</u>	<u>\$ -</u>	<u>\$ 1,289,143</u>	<u>\$ 1,051,911</u>

Amount of depreciation expense charged to:

A/C#	Amount Charged
711	\$ -
717	-
733	-
738	6,575
743	24,099
753	912
788	865
804	19,892
	<u>\$ 52,343</u>

(included in overhead allocation)

32,451
19,892
<u>\$ 52,343</u>

Depreciation Expense - Linking period of 6/1/2022 to 1/31/2023

Depreciation charges on trucks allocated through work orders - Linking period of 6/1/2022 to 1/31/2023

(A) - Depreciation expense during the linking period of 6/1/2022 to 1/31/2023 is presented as 8 months of annual depreciation expense.

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENTDEPRECIATION CALCULATIONS
Rate Year

A/C#	1/31/2023	1/31/2024	Avg. Gross Bal.	Less:	Avg. Balance Subject to Depreciation	Dep. Rate	Depreciation Reserves			1/31/2024	Remaining Cost	
	Beg of Yr. Bal.	End of Yr. Bal.		Contributions for Extension			Depreciation Expense A/C#	Amt.	Beg of Yr. Bal.	(Retirements) Salvage		End of Yr. Bal.
301	\$ 177	\$ 177	\$ 177	\$ -	\$ 177	-		\$ -	\$ -	\$ -	\$ -	\$ 177
302	-	-	-	-	-	-		-	-	-	-	-
303	-	-	-	-	-	-		-	-	-	-	-
311	269	269	269	-	269	-	743 & 788	-	-	-	-	269
312	78,396	78,396	78,396	-	78,396	1.77%	738	1,388	45,910	-	47,298	31,098
321	-	-	-	-	-	-		-	-	-	-	-
322	-	-	-	-	-	-		-	-	-	-	-
323	-	-	-	-	-	-		-	-	-	-	-
325	-	-	-	-	-	-		-	-	-	-	-
331	-	-	-	-	-	-	711	-	-	-	-	-
332	-	-	-	-	-	-	711	-	-	-	-	-
333	-	-	-	-	-	-	711	-	-	-	-	-
334	-	-	-	-	-	-	711	-	-	-	-	-
342	-	-	-	-	-	-	717	-	-	-	-	-
344	-	-	-	-	-	-	717	-	-	-	-	-
345	-	-	-	-	-	-	717	-	-	-	-	-
351	-	-	-	-	-	-	733	-	-	-	-	-
352	-	-	-	-	-	-	733	-	-	-	-	-
353	-	-	-	-	-	-	738	-	-	-	-	-
354	-	-	-	-	-	-	733	-	-	-	-	-
358	307,452	366,902	337,177	(32,698)	304,479	3.11%	738	9,469	125,434	(21,600)	113,304	253,598
359	-	-	-	-	-	-	738	-	-	-	-	-
361	732,430	771,630	752,030	(76,841)	675,189	2.08%	743	14,044	499,705	(8,700)	505,049	266,581
362	-	-	-	-	-	-	743	-	-	-	-	-
363	196,603	201,753	199,178	(1,599)	197,579	1.80%	743	3,556	26,788	-	30,345	171,408
364	85,092	89,092	87,092	-	87,092	1.80%	743	1,568	33,252	-	34,820	54,272
365	223,689	224,839	224,264	-	224,264	2.31%	743	5,180	95,381	-	100,562	124,277
366	74,367	75,517	74,942	-	74,942	2.09%	743	1,566	2,060	-	3,626	71,891
367	-	-	-	-	-	-	743	-	-	-	-	-
368	89,379	97,279	93,329	-	93,329	3.33%	743	3,108	47,539	-	50,647	46,632
369	1,645	1,645	1,645	-	1,645	3.33%	743	55	1,542	-	1,596	49
370	4,227	4,227	4,227	-	4,227	2.25%	743	95	(32)	-	64	4,163
371	62,004	77,874	69,939	-	69,939	2.25%	753	1,574	(2,831)	(6,350)	(7,607)	85,481
381	21,739	21,739	21,739	-	21,739	4.00%	788	870	24,453	-	25,322	(3,583)
382	10	10	10	-	10	-	788	-	10	-	10	-
383	267	267	267	-	267	-	788	-	267	-	267	-
384	372,974	489,686	431,330	-	431,330	8.00%	804	34,506	337,702	(209,876)	162,332	327,354
385	-	-	-	-	-	-	788	-	-	-	-	-
386	12,878	12,878	12,878	-	12,878	3.32%	788	428	9,574	-	10,002	2,876
387	77,457	123,942	100,700	-	100,700	10.00%	743	10,070	42,389	-	52,459	71,483
388	-	-	-	-	-	-	788	-	-	-	-	-
391	-	-	-	-	-	5.00%	788	-	-	-	-	-
	\$ 2,341,054	\$ 2,638,121	\$ 2,489,587	\$ (111,138)	\$ 2,378,449			\$ 87,476	\$ 1,289,143	\$ (246,526)	\$ 1,130,093	\$ 1,508,027

Amount of depreciation expense charged to:

A/C#	Amount Charged	
711	\$ -	
717	-	
733	-	
738	10,857	
743	39,242	
753	1,574	
788	1,297	
804	34,506	(included in overhead allocation)
	<u>\$ 87,476</u>	
	52,970	Depreciation Expense - Rate Year
	34,506	Depreciation charges on trucks allocated through work orders - Rate Year
	<u>\$ 87,476</u>	

VILLAGE OF PHILADELPHIA

ELECTRIC DEPARTMENT

FORECASTED CAPITAL IMPROVEMENTS

Linking Period and Rate Year

The Village has identified certain capital improvements expected to be completed during the period 6/1/2022 to 1/31/2023 (Linking Period) and the Rate Year. These improvements include material costs and capitalized labor and overhead, and is netted of retirements in the chart below.

The Village has identified certain capital improvements expected to be completed during the period 6/1/2022 to 1/31/2023 (Linking Period) and the Rate Year. These improvement includes material costs and capitalized labor and overhead, and is netted of retirements in the chart below.

Linking Period 6/1/2022 to 1/31/2023
Projects (represents 8/12ths of average)

	<u>Labor</u>	<u>Material</u>	<u>Engineer</u>	<u>Contractor</u>	<u>Truck Overhead**</u>	<u>Material Overhead**</u>	<u>Employee Ben Overhead**</u>	<u>Total Cost</u>	<u>Retired Equipment</u>	<u>Account Number</u>
Poles and related fixtures (estimated 6/1/2022 to 1/31/2023)	1,000	1,960	-	-	350	195	950	4,455	-	358
Distribution Overhead Conductors (estimated 6/1/2022 to 1/31/2023)	500	1,660	-	-	175	163	475	2,973	-	363
Distribution Underground Conductors (estimated 6/1/2022 to 1/31/2023)	200	55	-	-	70	7	190	522	-	364
Line Transformers (estimated 6/1/2022 to 1/31/2023)	500	3,610	-	-	175	361	475	5,121	-	365
Overhead Services (estimated 6/1/2022 to 1/31/2023)	200	450	-	-	70	41	190	951	-	366
Consumer Meters (estimated 6/1/2022 to 1/31/2023)	100	1,045	-	-	35	102	95	1,377	-	368
Street Lighting (estimated 6/1/2022 to 1/31/2023)	500	1,145	-	-	175	113	475	2,408	-	371
Total Anticipated Cap Improv. - Linking Period 6/1/2022 to 1/31/2023	\$ 3,000	\$ 9,925	\$ -	\$ -	\$ 1,050	\$ 981	\$ 2,850	\$ 17,806	\$ -	

<u>Rate Year Project</u>	<u>Labor</u>	<u>Material</u>	<u>Engineer</u>	<u>Contractor</u>	<u>Truck Overhead</u>	<u>Material Overhead</u>	<u>Employee Ben Overhead</u>	<u>Total Cost</u>	<u>Retired Equipment</u>	<u>Account Number</u>
Poles and related fixtures (Sandy Hollow Road)	\$ -	\$ -	\$ -	\$ 75,350	\$ -	\$ -	\$ -	\$ 75,350	\$ 21,600	358
Street Lighting (LED)	-	-	-	19,920	-	-	-	19,920	6,350	371
Bucket Truck (Altec quote-Village committed)	-	-	-	326,588	-	-	-	326,588	209,876	384
Substation Recloser Controller (North Bank)	-	-	-	23,950	-	-	-	23,950	4,350	361
Substation Recloser Controller (South Bank)	-	-	-	23,950	-	-	-	23,950	4,350	361
50 KW Diesel Generator (new building)	-	-	-	46,485	-	-	-	46,485	-	387
	-	-	-	516,243	-	-	-	516,243	246,526	

Re-occurring Capital Improvements

Poles and related fixtures	2,000	1,000	-	-	700	100	1,900	5,700	-	358
Distribution Overhead Conductors	2,000	500	-	-	700	50	1,900	5,150	-	363
Distribution Underground Conductors	1,500	500	-	-	525	50	1,425	4,000	-	364
Line Transformers	500	-	-	-	175	-	475	1,150	-	365
Overhead Services	500	-	-	-	175	-	475	1,150	-	366
Consumer Meters	2,000	3,000	-	-	700	300	1,900	7,900	-	368
Street Lighting	1,000	-	-	-	350	-	950	2,300	-	371
	9,500	5,000	-	-	3,325	500	9,025	27,350	-	
Total Anticipated Capital Improvements - Rate Year	\$ 9,500	\$ 5,000	\$ -	\$ 516,243	\$ 3,325	\$ 500	\$ 9,025	\$ 543,593	\$ 246,526	

****Overhead Percentages in place for Fiscal Year ended May 31, 2023**

Truck overhead costs calculated at 35% of Direct Labor cost

Material overhead costs calculated at 10% of Material cost

Employee benefits and supervision overhead costs calculated at 50% and 45% of Labor Costs, respectively.

Workpapers

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

WEATHER NORMALIZATION OF REVENUES (BASED ON MAY 31, 2022)

Assume non-weather load to be average of lowest two months kWh Sales

From 5/31/22 Annual Report: Actual kWh & Actual Base Revenue

	kWh Sold			Base Revenue		
	Winter	Summer	Total	Winter	Summer	Summer
	Nov-April kWh	May-Oct kWh	kWh	Nov-April \$	May-Oct \$	\$
601 Residential	5,137,427	2,580,113	7,717,540	\$ 291,839	\$ 136,432	\$ 428,271
602 Commercial	227,435	153,535	380,970	\$ 14,753	\$ 8,736	\$ 23,489
Total	5,364,862	2,733,648	8,098,510	\$ 306,592	\$ 145,168	\$ 451,760

Weather Normalization - Sales

	Nov-April kWh	Nov-April kWh	Increase/(Decrease)	Adjusted
	Non-Weather kWh	Weather kWh	Weather Load	Nov-Apr kWh
601 Residential	2,408,670	2,728,757	2,705,290	5,113,960
602 Commercial	141,540	85,895	85,156	226,696
Total	2,550,210	2,814,652	2,790,446	5,340,656
	kWh	%		
	Adjustment	Adjustment		
After Adjustment	5,340,656			
Before Adjustment	5,364,862			
Adjustment	(24,206)	-0.45%		
	Nov-April	Nov-April		
	Non-Weather \$	Weather \$		
601 Residential	\$ 291,839	290,522		
602 Commercial	\$ 14,753	14,686		
Total	\$ 306,592	305,208	\$ (1,384)	

Weather Normalization - Purchased Power

Change in kWh	(24,206)
Base Cost of Power	\$ 0.023457
FOA - Rate Year	1.030070
	\$ 0.024162
Adjustment	\$ (585)

	Staff	Revenue Req.
	Adjustment	Effect
Revenue	\$ (1,384)	\$ 1,384
Purchased Power	\$ (585)	\$ (585)
Net		\$ 799

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

WEATHER NORMALIZATION OF REVENUES - kWh Usage (BASED ON MAY 31, 2022)

5/31/2022 Sales - From Annual Report

601-Residential

	<u>kWh</u>	<u>Lowest Two Months</u>	<u>Base Revenues</u>
June	398,459	398,459	\$ 21,210
July	469,571	0	24,640
August	441,257	0	23,288
September	404,431	404,431	21,503
October	423,487	0	22,433
November	592,711	0	33,045
December	957,011	0	54,497
January	1,089,762	0	62,679
February	981,418	0	56,153
March	825,362	0	46,737
April	691,163	0	38,728
May	442,908	0	23,358
TOTALS	7,717,540		\$ 428,271
AVERAGES		401,445	

602-Commercial

	<u>kWh</u>	<u>Lowest Two Months</u>	<u>Base Revenues</u>
June	25,548	0	\$ 1,421
July	29,996	0	1,698
August	25,896	0	1,463
September	23,615	23,615	1,357
October	24,915	0	1,427
November	25,503	0	1,684
December	39,668	0	2,566
January	44,349	0	2,857
February	45,053	0	2,902
March	39,593	0	2,569
April	33,269	0	2,175
May	23,565	23,565	1,370
TOTALS	380,970		\$ 23,489
AVERAGES		23,590	

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

WEATHER NORMALIZATION CALCULATIONS - HEATING DEGREE DATA (BASED ON MAY 31, 2022)

Heating Degree Data

<https://www.nyserda.ny.gov/About/Publications/EA-Reports-and-Studies/Weather-Data/Monthly-Cooling-and-Heating-Degree-Day-Data>

Watertown, New York

Season	Nov	Dec	Jan	Feb	Mar	Apr	Total	% Deviation from 10 Year Average
2012-13	863	1,027	1,216	1,209	1,013	633	5,961	
2013-14	894	1,264	1,502	1,342	1,303	621	6,926	
2014-15	765	990	1,538	1,657	1,188	633	6,771	
2015-16	659	781	1,289	1,219	916	764	5,628	
2016-17	664	1,125	1,173	984	1,181	526	5,653	
2017-18	828	1,421	1,433	997	1,093	814	6,586	
2018-19	951	1,150	1,488	1,183	1,145	653	6,570	
2019-20	985	1,195	1,154	1,181	875	721	6,111	
2020-21	639	1,070	1,320	1,309	938	578	5,854	
2021-22	788	995	1,660	1,230	984	632	6,289	-0.86%
							6,235	Ten Year Average of November - April

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

EXPENSE ALLOCATION
Fiscal Year May 31, 2022

Expense	Fiscal Yr. 2022 Amount	Comment
Purchased Power	\$ 385,234	Account 721, PSC Report page 306
Labor	102,030	PSC Report, page 102. Total salaries less salaries capitalized (\$111,916 less \$9,886)
Taxes	-	Account 403, PSC Report page 106
Uncollectible revenues	2,074	Account 404, PSC Report page 106
Rent	9,980	Account 786, PSC Report page 307
FICA, Medical, Wcomp, Retirement	51,572	Actual per client
Insurance	6,840	Account 783, PSC Report page 307
Depreciation	40,489	Accounts 738, 743, 753, 788, PSC Report pages 306 and 307
Contractual/Vendor		
Transmission	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
Maint. Poles	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
Distribution	37,808	Represents an allocation of remaining costs based on cost of individual category. (See below)
Street Lights	130	Represents an allocation of remaining costs based on cost of individual category. (See below)
Consumer Accounting and Collection	3,939	Represents an allocation of remaining costs based on cost of individual category. (See below)
Sales Expense	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
General & Administ.	59,466	Represents an allocation of remaining costs based on cost of individual category. (See below)
Contractual appropriations of income - IEEP	10,881	Account 459, PSC Report page 106
	\$ 710,443	

Cost Category (per PSC Report, excluding depreciation and separately stated costs)	Actual	%	Allocated Remaining Cost**
Transmission	\$ -	0.00%	\$ -
Maint. Poles	-	0.00%	-
Distribution	75,873	37.31%	37,808
Street Lights	261	0.13%	130
Consumer Accounting and Collection	7,904	3.89%	3,939
Sales Expense	-	0.00%	-
General & Administrative	119,335	58.68%	59,466
	\$ 203,373	100.00%	\$ 101,343

Total Cost in P&L (not incl. interest expense)

\$ 710,443

** Contractual Costs

Calculation of Remaining Costs to be Allocated

Total Cost in P&L (not incl. interest expense) **\$ 710,443**

Less separately stated costs from above:

Purchased Power \$ 385,234
Labor 102,030
Taxes -
Uncollectible revenues 2,074
Rent 9,980
FICA, Medical, Wcomp, Retirement 51,572
Insurance 6,840
Depreciation 40,489
Contractual appropriations of income - IEEP 10,881

\$ 609,100

Remaining Costs to be Allocated **\$ 101,343**

A = Remaining Cost is the difference between total costs in the P&L of \$710,443 less the costs stated in Column D, not including contractual costs (therefore, Cells D4 through D11 and D20)

The total of Column D, not including contractual costs is \$ 609,100

Therefore, \$710,443 less \$609,100 = \$ 101,343 Remaining cost to be allocated

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

EXPENSE ALLOCATION
Fiscal Year May 31, 2021

Expense	Fiscal Yr. 2021 Amount	Comment
Purchased Power	\$ 370,208	Account 721, PSC Report page 306
Labor	93,593	PSC Report, page 102. Total salaries less salaries capitalized (\$96,711 less \$3,118))
Taxes	-	Account 403, PSC Report page 106
Uncollectible revenues	12,371	Account 404, PSC Report page 106
Rent	9,960	Account 786, PSC Report page 307
FICA, Medical, Wcomp, Retirement	45,929	Actual per client
Insurance	5,886	Account 783, PSC Report page 307
Depreciation	40,009	Accounts 738, 743, 753, 788, PSC Report pages 306 and 307
Contractual/Vendor		
Transmission	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
Maint. Poles	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
Distribution	21,986	Represents an allocation of remaining costs based on cost of individual category. (See below)
Street Lights	463	Represents an allocation of remaining costs based on cost of individual category. (See below)
Consumer Accounting and Collection	4,362	Represents an allocation of remaining costs based on cost of individual category. (See below)
Sales Expense	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
General & Administ.	65,541	Represents an allocation of remaining costs based on cost of individual category. (See below)
Contractual appropriations of income - IEEP	9,512	Account 459, PSC Report page 106
	<u>\$ 679,820</u>	

Cost Category (per PSC Report, excluding depreciation and separately stated costs)

	Actual	%	Allocated Remaining Cost**	
Transmission	\$ -	0.00%	\$ -	
Maint. Poles	-	0.00%	-	
Distribution	44,267	23.81%	21,986	
Street Lights	933	0.50%	463	
Consumer Accounting and Collection	8,782	4.72%	4,362	
Sales Expense	-	0.00%	-	
General & Administrative	131,963	70.97%	65,541	
	<u>\$ 185,945</u>	<u>100.00%</u>	<u>\$ 92,352</u>	A

Total Cost in P&L (not incl. interest expense) \$ 679,820

** Contractual Costs

Calculation of Remaining Costs to be Allocated	
Total Cost in P&L (not incl. interest expense)	<u>\$ 679,820</u>
Less separately stated costs from above:	
Purchased Power	\$ 370,208
Labor	93,593
Taxes	-
Uncollectible revenues	12,371
Rent	9,960
FICA, Medical, Wcomp, Retirement	45,929
Insurance	5,886
Depreciation	40,009
Contractual appropriations of income - IEEP	9,512
	<u>\$ 587,468</u>
Remaining Costs to be Allocated	<u>\$ 92,352</u>

A = Remaining Cost is the difference between total costs in the P&L of \$679,820 less the costs stated in Column D, not including contractual costs (therefore, Cells D4 through D11 and D20 through D21)
The total of Column D, not including contractual costs is \$ 587,468
Therefore, \$679,820 less \$587,468 = \$ 92,352 Remaining cost to be allocated

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

EXPENSE ALLOCATION
Fiscal Year May 31, 2020

Expense	Fiscal Yr. 2020 Amount	Comment
Purchased Power	\$ 304,390	Account 721, PSC Report page 306
Labor	103,663	PSC Report, page 102. Total salaries less salaries capitalized (\$111,649 less \$7,986)
Taxes	-	Account 403, PSC Report page 106
Uncollectible revenues	1,675	Account 404, PSC Report page 106
Rent	474	Account 786, PSC Report page 307
FICA, Medical, Wcomp, Retirement	75,647	Actual per client
Insurance	8,423	Account 783, PSC Report page 307
Depreciation	39,485	Accounts 733, 738, 743, 753, 788, PSC Report pages 306 and 307
Contractual/Vendor		
Transmission	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
Maint. Poles	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
Distribution	29,298	Represents an allocation of remaining costs based on cost of individual category. (See below)
Street Lights	1,578	Represents an allocation of remaining costs based on cost of individual category. (See below)
Consumer Accounting and Collection	3,718	Represents an allocation of remaining costs based on cost of individual category. (See below)
Sales Expense	-	Represents an allocation of remaining costs based on cost of individual category. (See below)
General & Administ.	62,274	Represents an allocation of remaining costs based on cost of individual category. (See below)
Contractual appropriations of income - IEEP	9,223	Account 459, PSC Report page 106
	\$ 639,847	

Cost Category (per PSC Report, excluding depreciation and separately stated costs)	Actual	%	Allocated Remaining Cost**
Transmission	\$ -	0.00%	\$ -
Maint. Poles	-	0.00%	-
Distribution	60,651	30.25%	29,298
Street Lights	3,267	1.63%	1,578
Consumer Accounting and Collection	7,696	3.84%	3,718
Sales Expense	-	0.00%	-
General & Administrative	128,916	64.29%	62,274
	\$ 200,530	100.00%	\$ 96,867

Total Cost in P&L (not incl. interest expense) **\$ 639,847**

** Contractual Costs

Calculation of Remaining Costs to be Allocated	
Total Cost in P&L (not incl. interest expense)	\$ 639,847
Less separately stated costs from above:	
Purchased Power	\$ 304,390
Labor	103,663
Taxes	-
Uncollectible revenues	1,675
Rent	474
FICA, Medical, Wcomp, Retirement	75,647
Insurance	8,423
Depreciation	39,485
Contractual appropriations of income - IEEP	9,223
	\$ 542,980
Remaining Costs to be Allocated	\$ 96,867

A = Remaining Cost is the difference between total costs in the P&L of \$639,847 less the costs stated in Column D, not including contractual costs (therefore, Cells D4 through D11 and D20 through D21)
The total of Column D, not including contractual costs is \$ 542,980
Therefore, \$639,847 less \$542,980 = \$ 96,867 Remaining cost to be allocated

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

PROJECTED COSTS FOR RATE YEAR

Expense	(Workpaper B) Fiscal Yr. 2022 Amount	(Workpaper B-1) Fiscal Yr. 2021 Amount	(Workpaper B-2) Fiscal Yr. 2020 Amount	Three Year Average	Costs Adjusted for Known or Calculated Changes	Cost Determined by:
Purchased Power	\$ 385,234	\$ 370,208	\$ 304,390	\$ 353,277	\$ 384,394	Calculated - Weather Normalization Adjustment
Labor, net of capitalized amounts	102,030	93,593	103,663	99,762	112,916	Salary increases are based on existing union contract requirements, as well as salary adjustments for non-union employees. Total salaries for the Rate Year are forecasted to be \$122,416 of which \$9,500 is expected to be capitalized.
PILOT to Village of Philadelphia	-	-	-	-	7,100	Supported by PILOT calculation at Workpaper G.
Uncollectible revenues	2,074	12,371	1,675	5,373	6,149	Generally good collection history. Rate Year is equal to 3 year (2022/2021/2020) average, as a percent of gross electric revenues.
Rent	9,980	9,960	474	6,805	44,616	Electric Department's 25% share of annual debt service payments on bond used to finance new office building. This is considered rent expense.
FICA, medical, retirement, workers' compensation, etc.	51,572	45,929	75,647	57,716	52,907	Based on quoted premiums or budgeted amounts (allocated to Electric Department), calculation (for FICA) on total salaries.
Insurance	6,840	5,886	8,423	7,050	7,050	3 Year average
Depreciation	40,489	40,009	39,485	39,994	52,970	Calculated at Exhibit 14. Increase is due to asset additions.
Contractual/Vendor						
Transmission	-	-	-	-	-	3 Year average
Maint. Poles	-	-	-	-	-	3 Year average
Distribution	37,808	21,986	29,298	29,697	29,697	3 Year average
Street Lights	130	463	1,578	724	724	3 Year average
Consumer Accounting and Collection	3,939	4,362	3,718	4,006	4,006	3 Year average
Sales Expense	-	-	-	-	-	3 Year average
General & Administ.	59,466	65,541	62,274	62,427	62,427	3 Year average
Amortization of rate filing costs	-	-	-	-	8,333	Anticipated rate filing costs of \$25,000, amortized over 3 year period of benefit
Contractual appropriations of income - IEEP	10,881	9,512	9,223	9,872	10,303	Based on anticipated sales of kWh in the Rate Year, multiplied by .001 "adder."
	\$ 710,443	\$ 679,820	\$ 639,847	\$ 676,703	\$ 783,592	

VILLAGE OF PHILADELPHIA

ELECTRIC DEPARTMENT

PURCHASED POWER ADJUSTMENT RECONCILIATION

			(a)	(b)	(a*b) © Billed PPAC	PURCHASE MONTH	(d) TOTAL POWER BILL	National Grid (f) National Grid Trans Charges	(f.1.) TCC COST	IEEP (f.2.) SUR- CHARGE (CREDIT)	(f.3.) CES Charges***	(d+f+f.1.+f.2-f.3) (g) TOTAL PRESENT COST	(h) TOTAL KWH DEL.	(i) BASE COST \$/ KWH	(h*i) (m) BASE COST POWER	(g-m) (k) DIFF. PRESENT VS. BASE	(k-c) (l) NET (OVER) UNDER
MONTH	Y	R	KWH SALES	PPAC \$/KWH	REVENUES												
JUNE	2	1	552,543	0.013666	6,702	MAY	17,658	10,918	903	686	(3,548)	26,617	739,306	0.023457	17,342	9,275	2,573
JULY	2	1	636,401	0.007848	4,811	JUNE	15,661	4,884	903	636	(2,980)	19,104	621,038	0.023457	14,568	4,536	(275)
AUGUST	2	1	597,209	0.006220	3,758	JULY	15,328	4,444	903	597	(3,002)	18,270	625,698	0.023457	14,677	3,593	(165)
SEPTEMBER	2	1	560,788	0.004276	2,398	AUGUST	16,312	5,017	903	561	(3,412)	19,381	711,186	0.023457	16,682	2,699	301
OCTOBER	2	1	590,000	0.011207	6,612	SEPTEMBER	13,086	6,919	903	590	(2,667)	18,831	555,796	0.023457	13,037	5,794	(818)
NOVEMBER	2	1	789,464	0.007533	5,947	OCTOBER	16,468	4,991	903	789	(3,134)	20,017	652,914	0.023457	15,315	4,702	(1,245)
DECEMBER	2	1	1,252,114	0.008912	11,159	NOVEMBER	24,491	7,725	903	1,252	(4,476)	29,895	932,568	0.023457	21,875	8,020	(3,139)
JANUARY	2	2	1,420,151	0.009857	13,999	DECEMBER	31,711	10,051	903	1,420	(5,628)	38,457	1,172,748	0.023457	27,509	10,948	(3,051)
FEBRUARY	2	2	1,308,854	0.020914	27,372	JANUARY	62,476	12,723	903	1,309	(10,035)	67,376	1,583,410	0.023457	37,142	30,234	2,862
MARCH	2	2	1,108,402	0.013657	15,138	FEBRUARY	43,494	8,594	903	1,108	(8,111)	45,988	1,279,808	0.023457	30,020	15,968	830
APRIL	2	2	924,909	0.006699	6,196	MARCH	34,404	3,569	903	925	(6,040)	33,761	1,144,734	0.023457	26,852	6,909	713
MAY	2	2	608,888	-0.001247	(758)	APRIL	18,947	2,547	903	609	(4,084)	18,922	820,750	0.023457	19,252	(330)	428
			<u>10,349,723</u>		<u>103,334</u>		<u>310,036</u>	<u>82,382</u>	<u>10,836</u>	<u>10,482</u>	<u>(57,117)</u>	<u>356,619</u>	<u>10,839,956</u>		<u>254,273</u>	<u>102,346</u>	<u>(988)</u>

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

FORECASTED SALARIES - RATE YEAR (February 1, 2023 to January 31, 2024)

Period of February 1, 2023 to May 31, 2023 (4 months)	Annual	Hourly	OT	Expected		Longevity/		Reg. Wages	OT Wages	Total Wages	Electric Fund Allocation	Rate Year
	Salary	Rate	Hourly Rate	Reg Hours	OT Hours	Health Ins	Buyout					Electric Fund Alloc Wages
Mayor	\$ 5,278	n/a	n/a	n/a		\$	-	\$ 1,759	-	1,759	25%	\$ 440
Trustee	3,122	n/a	n/a	n/a			-	1,041	-	1,041	25%	260
Trustee	3,122	n/a	n/a	n/a			-	1,041	-	1,041	25%	260
James Saffin, Superintendent		29.23	43.85	693	16.67		-	20,266	731	20,997	38%	8,014
Cole Jenne, Lineman		20.41	30.62	693	42.67		-	14,151	1,306	15,457	32%	4,879
Peter Kilcer, Lineman		17.54	26.31	693	46.67		-	12,161	1,228	13,389	21%	2,796
Ryan Gleisner, Lineman		16.75	25.13	693	46.67		1,803	11,613	1,173	14,589	25%	3,715
Cody Thomas, Lineman		21.72	32.58	693	46.67		-	15,059	1,520	16,580	33%	5,403
Jennifer Lamora, Clerk-Treasurer		29.23	43.85	693	-		2,400	20,266	-	22,666	45%	10,200
Allison Godin, Deputy Clerk		19.89	29.84	693	-		2,400	13,790	-	16,190	25%	4,048
Forecasted Salaries (2/1/2023 to 5/31/2023)							6,603	111,148	5,958	123,709		40,013
Period of June 1, 2023 to January 31, 2024 (8 months)	Annual	Hourly	OT	Expected		Longevity/		Reg. Wages	OT Wages	Total Wages	Electric Fund Allocation	Rate Year
	Salary	Rate	Hourly Rate	Reg Hours	OT Hours	Health Ins	Buyout					Electric Fund Alloc Wages
Mayor	\$ 5,278	n/a	n/a	n/a		\$	-	\$ 3,519	-	3,519	25%	\$ 880
Trustee	3,122	n/a	n/a	n/a			-	2,081	-	2,081	25%	520
Trustee	3,122	n/a	n/a	n/a			-	2,081	-	2,081	25%	520
James Saffin, Superintendent		30.11	45.16	1,387	33.33		-	41,748	1,505	43,254	38%	16,509
Cole Jenne, Lineman		21.02	31.53	1,387	85.33		-	29,151	2,691	31,842	32%	10,050
Peter Kilcer, Lineman		18.57	27.86	1,387	93.33		-	25,750	2,600	28,350	21%	5,920
Ryan Gleisner, Lineman		17.25	25.88	1,387	93.33		3,607	23,923	2,415	29,945	25%	7,625
Cody Thomas, Lineman		22.37	33.56	1,387	93.33		-	31,022	3,132	34,154	33%	11,129
Jennifer Lamora, Clerk-Treasurer		30.11	45.16	1,387	-		4,800	41,748	-	46,548	45%	20,947
Allison Godin, Deputy Clerk		20.49	30.73	1,387	-		4,800	28,408	-	33,208	25%	8,302
Forecasted Salaries (6/1/2023 to 1/31/2024)							13,207	229,433	12,343	254,983		82,402
Total Forecasted Salaries - Rate Year							19,810	340,581	18,301	378,692		122,416

Note: Hourly rates for period 2/1/2023 to 5/31/2023 went into effect 6/1/2022.

Note: Hourly rates for period 6/1/2023 to 1/31/2024 are anticipated to go into effect 6/1/2023 (3% increase of existing hourly rates).

Note: Superintendent and Lineman salaries are allocated to the Electric Department based on a 4 year average of actual effort.

Expensed	112,916
Capitalized	9,500
	122,416

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

ACTUAL SALARIES AND ALLOCATIONS - FISCAL 2022 (BASE YEAR)

	Annual Salary	Hourly Rate	OT Hourly Rate	Reg Hours	OT Hours	Longevity/ Health Ins Buyout	Reg. Wages	OT Wages	Total Wages	Electric Fund Allocation	Rate Year Electric Fund Alloc Wages
Mayor	\$ 5,278	n/a	n/a	n/a	n/a	n/a	\$ 5,278	-	5,278	25%	\$ 1,320
Trustee	3,122	n/a	n/a	n/a	n/a	n/a	3,122	-	3,122	25%	781
Trustee	3,122	n/a	n/a	n/a	n/a	n/a	3,122	-	3,122	25%	781
James Saffin, Superintendent		27.92	41.88	2,080	53.00	-	58,072	2,220	60,292	35%	21,190
Cole Jenne, Lineman		19.50	29.25	2,080	127.25	-	40,565	3,722	44,287	32%	13,998
Peter Kilcer, Lineman		16.75	25.13	2,080	142.00	-	34,834	3,568	38,402	19%	7,221
Ryan Gleisner, Lineman		16.00	24.00	2,080	141.50	5,410	33,280	3,392	42,082	27%	11,166
Cody Thomas, Lineman		20.75	31.13	2,080	132.75	-	43,160	4,138	47,298	31%	14,429
Jennifer Lamora, Clerk-Treasurer		27.92	41.88	2,080	-	7,200	58,058	-	65,258	45%	29,366
Allison Godin, Deputy Clerk		19.00	28.50	2,080	-	7,200	39,456	-	46,656	25%	11,664
Total Salaries - Fiscal Year May 31, 2022						19,810	318,947	17,039	355,797		111,916

Expensed	102,030
Capitalized	9,886
	111,916

**VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT**

**CALCULATION OF PILOT PAYMENT
Rate Year**

<u>Operating Property Classification</u>	<u>Total Gross Cost (a)</u>	<u>Outside Village Gross Cost (b)</u>	<u>Inside Village Gross Cost (c)</u>	<u>Accum. Depreciation (d)</u>	<u>Net Book Value</u>
(311) Land and Land Rights	\$ 269	\$ -	\$ 269	\$ -	\$ 269
(312) Structures and Improvements	78,396	-	78,396	47,298	31,098
(358) Poles, Towers and Fixtures	366,902	74,510	292,392	90,294	202,098
(361) Distribution Substation Equipment	771,630	-	771,630	505,049	266,581
(363) Distribution Overhead Conductors	201,753	14,900	186,853	28,104	158,749
(364) Distribution Underground Conductors	89,092	7,482	81,610	34,820	46,790
(365) Line Transformers	224,839	13,921	210,918	94,336	116,582
(366) Overhead Services	75,517	4,671	70,846	3,402	67,444
	<u>\$ 1,808,398</u>	<u>\$ 115,484</u>	<u>\$ 1,692,914</u>	<u>\$ 803,301</u>	<u>\$ 889,613</u>

	Equalization Rate	96.50%
(a) Total Operating Property Subject to PILOT calculation	Equalized NBV	\$ 921,879
(b) Operating Property located outside Village boundaries		
(c) Operating Property located inside Village boundaries	Property Tax Rate	\$8.537000
(d) Accumulated Depreciation on Operating Property located inside Village boundaries		
(e) Net book value of Operating Property Subject to PILOT	PILOT per \$1,000	<u>\$ 7,870</u>

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR

Proposal -12232022-PWK-01 - Recloser Controller

Black&McDonald

December 23, 2022

Customer: Village of Philadelphia
56 Main Street
Philadelphia, NY 13673-0070

Attention: Jim Saffin (315-642-3452)
VOP.Jim@gmail.com

Project: Main Sub – Recloser Controller Upgrade

In accordance with your request, Black & McDonald is pleased to provide the following quotation for your review and consideration –

Furnish (1) new recloser controller to replace the defective 3A unit in recloser 50979. The new controller will be a SEL-351R with the proper adapter pieces for installation. The new controller will be shipped to B&M where it will be programmed and tested. The programming will match the existing settings. B&M will coordinate with the Village for installation. After installation, instructions on the new controller will be given to Village personnel. A formal report will be provided at the conclusion of the project.

The above to be performed on straight-time (weekdays), on a Time and Materials basis for the ESTIMATED price of –
Twenty-Three Thousand, Nine Hundred Fifty Dollars (\$23,950.00)

The above price is based on the following:

1. This Proposal is subject to the attached terms and conditions.
2. LEAD TIME ON MATERIALS IS 48 WORKING DAYS ARO.
3. Scheduled outdoor work is subject to weather conditions. A final decision on weather will be agreed to by both parties 1-2 days prior to scheduled work date.
4. Delays due to weather, equipment availability, or other factors beyond Black & McDonald's control are not included.
5. All switching to be performed with/by Philadelphia personnel.
6. Excludes any/all replacement parts and/or repairs unless otherwise stated. Repairs can be quoted as needed.
7. Excludes any/all taxes and permits.
8. Excludes any/all utility charges. None anticipated.
9. Excludes furnishing of a lift. Lift not anticipated being required.
10. Travel is included in the estimated price.
11. A report is included and will be provided in electronic format (and paper if requested) at project completion.

Should you require further information, please do not hesitate to contact me directly.

Regards,

Paul Kolodzie

Paul Kolodzie
Estimator/Project Manager
Black & McDonald
pkolodzie@blackandmcdonald.com
Cell: (315) 530-0619 | Office: (315) 898-8756

A Tradition of Quality Since 1921

6518 Fremont Road, East Syracuse, NY 13057 • 315-898-8751 • www.blackandmcdonald.com

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VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR

Proposal -12232022-PWK-01 - Recloser Controller

Black&McDonald

Terms & Conditions

1. This proposal shall expire if not accepted within 30 days of the date indicated above.
2. Payment terms shall be Net 30 days. A finance charge of 18% per annum will be added to all past due accounts. Failure to dispute any invoice within 35 days of the date of the invoice shall render an account stated.
3. Purchaser shall be liable for all reasonable attorney's fees, costs, and disbursements incurred in the collection of this account.
4. In addition to the price, Customer shall pay all applicable sales, use, excise, value-added or similar tax applicable to the value, sale or delivery of any products, services or work furnished hereunder, or for their use by Black & McDonald on behalf of Customer, whether such tax be municipal, state or federal. Customer shall also reimburse Black & McDonald for any tax or duty imposed on Black & McDonald to recover, recycle, reclaim, handle or dispose of any oil, refrigerant or other environmentally sensitive substance.
5. Customer agrees to provide reasonable access to work areas and equipment covered hereunder. Customer shall be responsible for removing, replacing, repairing or refinishing any barrier or building structure obstructing the performance of Black & McDonald's obligations hereunder.
6. All work shall be completed in a workmanlike manner according to industry standard practices. Black & McDonald assumes no responsibility for latent defects in the Owner's equipment. Any alteration or deviation from the above specifications involving extra costs will be executed only upon written orders, and will become an extra charge above and beyond this quotation. Black & McDonald is not responsible for delays beyond its control. Purchaser agrees to carry casualty and liability insurance on all equipment serviced. Black & McDonald's workers are fully covered by Workmen's Compensation Insurance.
7. Black & McDonald's total liability hereunder and in connection with the scope of work is limited to the total amount paid by Customer to Black & McDonald. In no event shall either party be liable for any consequential, indirect, incidental, special or punitive damages, losses, costs or expenses, including but not limited to loss of profits, loss of anticipated profits, loss of business, loss of data, loss of use, loss of production, loss of reputation or goodwill, business interruption or inconvenience whether arising by contract, statute, tort or otherwise, whether or not such party was notified of the possibility of such loss or damages occurring. Black & McDonald's liability for injury to persons or damage to property shall be limited to that caused directly by its negligent acts or omissions.
8. Warranties are subject to compliance with prudent industry standards of use and care in addition to all manufacturer and or Black & McDonald recommendations, instructions and requirements regarding proper use, care and maintenance of all work, including any and all equipment, systems and materials.
9. Customer agrees to accept price escalations and/or shipment delays, due to material price and availability, which are imposed by our suppliers.
10. There are no representations, conditions, understandings or agreements except those contained herein, and there shall be no modifications, alterations or amendments thereof in any respect unless made in writing and signed by both Black & McDonald and Customer.
11. Neither party shall be liable for any failure or delay in performing its obligations where such failure or delay results from any cause that is beyond the reasonable control of the Party. Such causes include, but are not limited to, fire, flood, storms, earthquakes, acts of terrorism, acts of war, pandemic, labor strike, civil unrest and power failure. If the delay continues for a period of 90 days, either party may terminate this Agreement or any portion of the Maintenance Plan with written notice.
12. During the term of this Agreement and until the date is six months from the date of termination of this agreement, the Customer shall not, without the prior written consent of Black & McDonald, solicit, hire or otherwise retain in any capacity, any employee of Black & McDonald who the Customer is dealing with or has dealt with in its relationship with Black & McDonald to facilitate the performance of this Agreement.
13. Any litigation or dispute resolution arising out of or pertaining to this contract shall be venued in Onondaga County, New York and shall be governed by the laws of New York State. Either party must commence any arbitration related to this contract no later than six (6) months after Black & McDonald last performs work at the project site(s). Amounts sought by purchaser in arbitration shall bear interest at the rate of zero (0) percent per year.
14. Purchaser shall indemnify Black & McDonald and hold Black & McDonald harmless from and against any loss, liability, damage, costs and expenses whatsoever arising from any violation of any law, ordinance or regulation, or any claimed personal injury, death, or damage to property caused, in part, by the purchaser, its agents, employees or consultants. The indemnities and assumptions of liability contained herein shall continue in full force and effect notwithstanding the cancellation or termination of this contract for any reason.

Date of acceptance: _____ Signature: _____

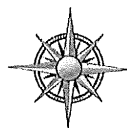
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VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR



FOURTH COAST INC

A NYS Certified Woman Business Enterprise (WBE)

745 GRAVES STREET
CLAYTON, NEW YORK 13624

315/408.7443

10 January 2023

Village of Philadelphia
56 Main Street
Philadelphia New York 13673

Attn: Jim Saffin

Re: Supply and Install 50 KW Cummins Diesel Genset and Annunciator Panel.

The proposal includes the supply and install of a 50kw diesel generator and annunciator panel. Install pricing includes service, start up and testing. Include a 2-hour load bank test, led acid batteries and training.

Total Price: \$46,485.00. (Specifications Attached)

Thank you for the opportunity.

Respectfully,

Fourth Coast Inc.

VILLAGE OF PHILADELPHIA ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR

FOURTH COAST INC STANDARD TERMS AND CONDITIONS

1 BILLING POLICY

1.1 Personnel Charges: Charges for employees shall be computed at the assigned billing rates in the attached letter, unless otherwise agreed upon in writing.

1.2 Sub Consultants and Reimbursable Expenses: Charges for technical services provided by others and reimbursable expenses shall be computed in accordance with attached letter. Reimbursable expenses shall also include the additional cost of insurance, if any, that is requested by the Client in excess of that normally carried by Fourth Coast Inc and/or St. Lawrence Engineering DPC hereinafter referred to as "FCI/SLE".

1.3 Payment: Invoices will be issued upon completion or periodically based on time or milestones based upon hourly rates or percent complete, payable upon receipt, unless otherwise agreed in writing. Interest of 1.5 percent per month will be payable on all amounts not paid within 45 days after receipt of invoice. The Client shall pay attorneys' fees or other costs incurred in collecting any delinquent amount.

1.4 Termination: Either the Client or FCI/SLE may terminate this Agreement at any time without cause upon giving the other party thirty (30) days prior written notice. The Client shall within fifteen (15) days of the date of the final invoice pay FCI/SLE for all services rendered and all costs incurred up to the date of termination, in accordance with the Payment provisions of this Agreement.

2 GENERAL CONDITIONS

2.1 Reuse of Documents: All reports, drawings, specifications, and other documents, including electronic media that were prepared by FCI/SLE as instruments of professional service, shall remain the property of FCI/SLE. The Client shall not reuse or make any modifications to the instruments of professional service without prior written authorization of FCI/SLE. In the event that there is a discrepancy between the electronic media and

the hard-copy documents, it is understood that the hard-copy documents shall prevail. It is the intent of FCI/SLE and the Client that the Client, its agents, representatives and consultants can use the documents in relationship to the project reflected in the agreed upon scope of work, any work necessary to design, complete, repair or replace work associated therewith.

2.2 Indemnification: The Client agrees, to the fullest extent permitted by law, to indemnify and hold FCI/SLE and its Consultants harmless from any damage, liability or cost, including reasonable attorneys' fees and costs of defense, arising out of or resulting from the negligent acts, errors or omissions of the Client, the Client's representatives, agents, employees, or anyone directly or indirectly employed by them. FCI/SLE agrees, to the fullest extent permitted by law, to indemnify and hold Client harmless from any damage, liability, cost, including reasonable attorneys' fees and costs of defense arising out of or resulting from the negligent acts, errors or omission of FCI/SLE, its representative, agents, employees, subcontractors or anyone directly or indirectly employed by them.

2.3 Codes & Standards Compliance: FCI/SLE shall put forth reasonable professional efforts to comply with applicable codes, regulations, and laws in effect as of the date of this Agreement.

2.4 Standard of Care: Services provided by FCI/SLE under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession practicing under similar circumstances.

2.5 Notices: Any notice given hereunder shall be deemed served immediately if hand-delivered in writing to an officer or other duly appointed representative of the party to whom the notice is directed, or if sent by registered or certified mail to the business address identified in this Agreement.

2.6 Insurance: During the term of this Agreement, FCI/SLE agrees to maintain the following insurance coverage and provide evidence if requested: Commercial General Liability Insurance and Automobile Liability. Professional Liability will be provided by Sub Consultants as required.

2.7 Mediation: In an effort to resolve any conflicts that arise during the project or following completion of the project, the Client and FCI/SLE agree that all disputes between them arising out of or relating to this Agreement shall be submitted to nonbinding mediation, unless the parties mutually agree otherwise.

2.8 Governing Law: The laws of the State of New York will govern the validity of this Agreement, its interpretation and performance. Any litigation arising in any way from this Agreement shall be brought in the courts of New York State.

2.9 Hazardous Wastes: The Client shall advise FCI/SLE of any known hazardous wastes or hazardous substances existing at or near the site at which FCI/SLE is to perform work. If FCI/SLE discovers hazardous wastes or hazardous substances after it undertakes the project, or if FCI/SLE discovers the nature or extent of hazardous wastes or hazardous substances differs materially from what the Client initially advised, FCI/SLE's Scope of Services, Schedule, and Fees made part of this Agreement shall be adjusted, as mutually agreed by the Client and FCI/SLE.

If reportable quantities of petroleum product and/or chemical contamination are encountered on the Project site during performance of the work tasks described herein, or during any subsequent work completed at the Project site, the appropriate local, state, and/or federal agencies must be notified, as required by law. FCI/SLE will make a reasonable attempt to notify the Client when reportable quantities are discovered. The Owner, or Client, as the Owner's representative, is responsible for providing notification to the proper authorities.

FCI/SLE shall have no responsibility for the presence, discovery, handling, removal, or disposal of, or exposure of person to, hazardous wastes or hazardous substances at the Project site. The Client shall indemnify and hold harmless FCI/SLE from any liability, loss, damage, or expense arising out of or related to the presence or discovery of hazardous wastes or hazardous substances on the Project site.

The ownership of and responsibility for all contaminated materials, hazardous materials, hazardous wastes, and hazardous substances generated, released, uncovered, transported, and/or collected during the work tasks referred to herein will remain with the Owner.

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR

2.10 Hidden Conditions: A condition is hidden if it is concealed or it is not capable of detection by reasonable visual observation. If FCI/SLE recognizes that a hidden condition may exist, FCI/SLE will notify the Client. FCI/SLE shall not be responsible for any costs or liabilities resulting from hidden conditions.

2.11 Buried Utilities (if applicable): The Client will furnish FCI/RJC with information identifying the type and location of utility lines and other man-made objects beneath the site's surface. FCI/SLE will take reasonable precautions to avoid damaging subsurface objects and will, prior to penetrating the site's surface, furnish to the Client a plan indicating the location of intended penetrations. The Client will approve these locations prior to their being made. The Client agrees to defend, indemnify, and hold harmless FCI/SLE or Sub consultants against any claim or liability for injury or loss resulting from damage to underground utilities and man-made objects that were not identified on plans or documents furnished by or on behalf of the Client.

2.12 Job Site Safety: The Contractor is solely responsible for the construction means, methods, sequence, techniques or procedures necessary to perform, direct or supervise all portions of the Work of construction in accordance with the Contract Documents and any health and safety regulations. The Contractor is solely responsible for job site safety. Neither the presence of FCI/SLE nor its sub consultants at a construction site nor the professional services of FCI/SLE shall relieve the Contractor or other construction entity of these responsibilities. The Contractor will be required to add the Client and FCI/SLE as additional insured's to their general liability policies and provides evidence of such coverage prior to commencing work on the project.

2.13 Limitation of Liability: The Client agrees to limit the Liability of FCI/SLE and its Sub Consultants to the fee paid under this agreement.

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR

Project: Philadelphia Municipal Bldg.
Quotation: Q-153193-20230105-1417

January 5, 2023

To: 4th Coast

Prepared by

Joe DePaulis
(315) 720-8664
joe.depaulis@cummins.com

We are pleased to provide you this quotation based on your inquiry.

Item	Description	Qty
1	C50D6, Diesel Genset, 60Hz, 50kW U.S. EPA, Stationary Emergency Application C50D6, 60kW, 60Hz, Standby, Diesel Genset Duty Rating - Standby Power (ESP) Emission Certification, EPA, Tier 3, NSPS CI Stationary Emergency Listing - UL 2200 NFPA 110 Type 10 Level 1 Capable Exciter/Reg - Torque Match Voltage - 120/208, 3 Phase, Wye, 4 Wire Alternator - 60Hz, 12L, 208/120V, 120C, 40C Ambient Alternator Heater, 120 Volt AC Aluminum Sound Attenuated Level 2 Enclosure, with Exhaust System Enclosure Color - Green, Aluminum Enclosure - Wind Load 180 MPH, ASCE7 - 10 Larger Battery Rack Skid base - Housing Ready UL142 Sub Base Dual Wall Basic, Diesel Fuel Tank, 24 Hour Minimum Low Fuel Level Switch, 40% Mechanical Fuel Gauge Switch - Fuel Tank, Rupture Basin Control Mounting - Right Facing Power Command 1.1 Controller Gauge - Oil Pressure Stop Switch - Emergency Control Display Language - English Load Connection - Single Circuit Breaker, Location A, 175A, 3P, 600 Volts AC, 80%, UL Right CB-None Engine Governor - Electronic, Isochronous Engine Starter - 12 Volt DC Motor Engine Air Cleaner - Normal Duty Battery Charging Alternator Battery Charger - 6 Amp, Regulated Engine Cooling - Radiator, High Ambient Air Temperature, Ship Fitted Shutdown - Low Coolant Level Extension - Coolant Drain Engine Coolant - 50% Antifreeze, 50% Water Mixture Coolant Heater Extension - Oil Drain Engine Oil Genset Warranty - 2 Years Base Literature - English Packing - Skid, Poly Bag Green Sound Level 2 Intake Baffle - Ship Loose Annunciator-Panel Mounted With Enclosure (RS485) Enclosure Kit-Onan Green, Sound Level 2	1
2	Service - start up & testing: includes a 2 hour load bank test, led acid batteries, training	1

Quotation: Q-153193-20230105-1417

VILLAGE OF PHILADELPHIA ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR

Specification sheet

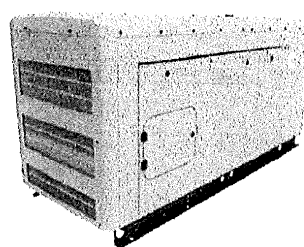


Diesel generator set

50 kW - 60 kW

EPA emissions

stationary Standby



Description

Cummins® generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby applications.

Features

Cummins heavy-duty engine - Rugged 4-cycle, liquid-cooled, industrial diesel engine delivers reliable power, low emissions and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Control system - The PowerCommand® 1.1 electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

Cooling system - Standard cooling package provides reliable running at up to 50 °C (122 °F) ambient temperature.

Enclosures - The aesthetically appealing enclosure incorporates special designs that deliver one of the quietest generators of its kind. Aluminum material plus durable powder coat paint provides the best anti-corrosion performance. The generator set enclosure has been evaluated to withstand 180 MPH wind loads in accordance with ASCE7-10. The intelligent design has removable panels and service doors to provide easy access for service and maintenance.

Fuel tanks - Two dual wall sub-base fuel tank series are offered as optional features, providing economical and flexible solutions to meet extensive code requirements on diesel fuel tanks.

NFPA - The generator set accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

Model	Standby rating 60 Hz		Prime rating 60 Hz		Data sheets 60 Hz
	kW	kVA	kW	kVA	
C50 D6	50.0	62.5	45.0	56.25	NAD-5863
C60 D6	60.0	75.0	54.0	67.50	NAD-5864

Our energy working for you.™

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power.cummins.com

VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR

Generator set specifications

Governor regulation class	TBC
Voltage regulation, no load to full load	± 1.0%
Random voltage variation	± 1.0%
Frequency regulation	Isochronous
Random frequency variation	TBD
Radio frequency emissions compliance	FCC code Title 47 Part 15 Class B

Engine specifications

Design	Turbocharged and charge air-cooled
Bore	95.0 mm (3.74 in.)
Stroke	115.0 mm (4.53 in.)
Displacement	3.26 litres (199 in ³)
Cylinder block	Cast iron, in-line, 4 cylinder
Battery capacity	550 amps at ambient temperature of 0 °F to 32 °F (-18 °C to 0 °C)
Battery charging alternator	50 amps
Starting voltage	12 volt, negative ground
Fuel system	Direct injection, number 2 diesel fuel, fuel filter, electric fuel shut off
Fuel filter	Single element, 10 micron filtration, spin-on fuel filter with water separator
Air cleaner type	Dry replaceable element
Lube oil filter type(s)	Spin-on, full flow
Standard cooling system	50 °C (122 °F) ambient cooling system
Rated speed	1800 rpm

Alternator specifications

Design	Brushless, 4 pole, drip proof, revolving field
Stator	2/3 pitch
Rotor	Direct coupled, flexible disc
Insulation system	Class H per NEMA MG1-1.65
Standard temperature rise	120 °C (248 °F) Standby
Exciter type	Torque match (shunt) with PMG as option
Alternator cooling	Direct drive centrifugal blower
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	3%

Available voltages

Single phase	3 phase
• 120/240	• 120/208 • 120/240 delta • 277/480 • 347/600

Note: Consult factory for other voltages.

Generator set options

Fuel system

- Basic fuel tanks
- Regional fuel tanks

Engine

- Engine air cleaner – normal or heavy duty
- Shut down – low oil pressure
- Extension – oil drain
- 120 V 1000 W coolant heater

Alternator

- One size up alternator
- PMG
- Alternator heater, 120 V

Control

- AC output analog meters (bargraph)
- Stop switch – emergency
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)

Electrical

- Single circuit breaker
- Dual circuit breakers

Enclosure

- Aluminum enclosure sound level 1 or level 2, with muffler installed, sandstone or green color
- Open set

Cooling system

- Shutdown – low coolant level
- Warning – low coolant level
- Extension – coolant drain
- Coolant heater – 120 V, 1 Ph

Exhaust system

- Exhaust connector - NPT

Generator set application

- Battery rack
- Battery rack, heavy duty

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VILLAGE OF PHILADELPHIA
ELECTRIC DEPARTMENT

COST PROPOSALS - SUBSTATION AND GENERATOR

VILLAGE OF PHILADELPHIA GENERATOR

MATERIALS	TOTAL
50 KW GENERATOR PACKAGE	\$ 35,055.00
2" EMT WITH FITTINGS	\$ 14.76
2"PVC 80 W/ FITTINGS (30 FT)	\$ 246.00
1" PVC 80 W/FITTINGS (60 FT)	\$ 123.00
200 FT. 2/0 THHN CABLE (POWER)	\$ 910.20
300 FT. #12 THHN WIRE (HEATER, CONTROL)	\$ 123.00
100 FT ANNUNCIATOR CABLE	\$ 61.50
30 FT. 2X12X16' FORM	\$ 98.40
1 1/2 YARDS CONCRETE	\$ 246.00
REROD-SCREEN	\$ 184.50
GRAVEL	\$ 123.00
MACHINE ALLOWANCE	\$ 500.00
MATERIAL TOTAL	\$ 37,685.00
LABOR	\$ 8,800.00
TOTAL PROJECT COST	\$ 46,485.00