

Jacksonville Village Electric Utility
Rate Case Study
Electric Fund Capital Projects

JEC-Jurczyk-15

Test Year: 12 months ending December 31, 2025
Rate Year: July 5, 2026 - July 4, 2027
Filed: 21-May-26



CAPITAL PROJECT PLAN

JEC owns several assets. Many are becoming dated and are near the end of their useful life. To date JEC has not had a capital improvement fund to assist with these improvements and is now seeing the cost of these projects becoming overwhelming. After assessing all the capital assets, a plan was created to track the cost for each upgrade and the yearly capital improvement investment needed to fund the upgrades going forward.

JEC Capital Assets and Useful Life

	Useful Life	Last upgrade	% of Life Remaining	End of Useful Life	Estimated Cost to upgrade
Building	50 years	1994	40%	2044	\$450,000
Bucket Truck	20 years	2019	75%	2039	\$275,000
Meter Reading Truck	10 years	2003	0%	2013	\$80,000
Poles	50 years	1985	22%	2035	\$1,300,000
Distribution Lines	50 years	1985	22%	2035	\$1,500,000
Transformers	50 years	2004	60%	2054	\$500,000
Metering Point	15 years	2021	80%	2036	\$75,000
Meters	15 years	1985	0%	2000	\$170,000

Meters - An AMI project has been launched for implementation within the next 2 years. This project will bring all 709 JEC meters up to date and in line with industry standards for smart metering enabling real time meter checking for customer support, outage management, and connections and disconnections. This contract is signed, and work is already underway to get the meters in place ASAP. A state grant has reduced the cost of this project from \$370K to around \$170K. After this upgrade JEC will need to plan for \$370K for future upgrades.

Meter Reading Truck - The JEC meter reading truck is a multipurpose vehicle. It is used monthly to read meters, help with tree trimming and outages restoration, and vehicle travel as needed to support customers. JEC current meter reading truck is well over its expected life and will need to be replaced very soon. It is expected to be about \$80K to replace this truck.

Poles - Pole replacements happen as needed for a large portion of the JEC grid. However, there are many poles that are getting close to the end of their useful life. JEC plans to replace all outdated, undersized and at-risk poles

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by 2035 to improve resiliency and improve transmission capabilities. JEC entire pole inventory is estimated to cost \$1.3M (1300 poles at \$1K for each pole).

Distribution Lines – In 1985 JEC transitioned away from an antiquated Delta System for power distribution. It is expected that by 2035 JEC will need to do another major upgrade to improve distribution to support customers' needs for Electric Vehicles, Heat Pumps and other heavy load appliances that are being installed. The distribution upgrade cost is estimated to be about \$1.5M (50 miles @ \$30K/mile or 264K feet @ \$5.68/foot).

Metering Point – JEC has a metering point on Route 100 that feeds from the GMP substation. This metering point received a major update in 2021 that is expected to last 15 years. Without regular upgrades and improvements, customers will experience whole grid outages and expensive 1 time emergency fixes. The estimated upgrades and maintenance costs are \$75K and are expected to be needed by 2036.

Bucket Truck – In 2024 JEC purchased a used 2019 Bucket truck to support customers and the line crew with line extensions, outages and tree work and service wraps. JEC can provide much faster, less expensive and more reliable service to its customers by having an internal line crew and bucket truck than if JEC strictly relied on GMP for service. There was no capital project plan in place for this purchase resulting in an 8.55% loan being needed to support this purchase. It is expected that the current truck will need to be replaced in 2039 at a cost of \$275K.

Building – The JEC plant last had a major upgrade in 1994 when an addition was installed to allow the bucket truck and meter truck to be stored under cover on site. Some aspects of the building are starting to show age and are clearly out of date from an efficiency perspective. The JEC plant currently does not have a well on site and one will need to be added in the coming years.

JEC Building/Plant Improvements with Estimates

<i>Plant Improvements</i>	<i>Estimated Cost</i>
Heating system	\$ 50,000
Windows	\$ 30,000
Doors	\$ 20,000
Flooring	\$ 10,000
Lighting	\$ 10,000
Paving	\$ 45,000
Electrical	\$ 25,000
Plumbing	\$ 40,000
Roof	\$ 60,000
Paint	\$ 30,000
Insulation	\$ 30,000
Structural/Engineering	\$ 100,000
Total	\$ 450,000

Transformers – JEC has approximately 500 transformers. Just like lines and poles they occasionally do get updated as they fail or as they get damaged. However, to ensure resiliency, JEC has assigned a 50-year useful life on transformers. JEC will need to upgrade all their transformers by 2054.

To pay for these capital improvements, JEC has committed to budgeting \$114,083 per year to a capital improvements fund. This amount will allow JEC to spread out the cost of much needed improvements over time and not rely on rate increases to fund major expenses that are known in advance.

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JEC Capital Costs by Year

	Estimated Upgrade Cost	Useful Life (Years)	Cost Per Year
Building	\$ 450,000	50	\$ 9,000
Bucket Truck	\$ 275,000	20	\$ 13,750
Meter Reading Truck	\$ 80,000	10	\$ 8,000
Poles	\$ 1,300,000	50	\$ 26,000
Distribution Lines	\$ 1,500,000	50	\$ 30,000
Transformers	\$ 1,300,000	50	\$ 26,000
Metering Point	\$ 75,000	15	\$ 5,000
Meters	\$ 170,000	15	\$ 11,333
Total			\$ 129,083

JEC will use the new GIS system and yearly visual inspection to track the age and condition of our poles, distribution lines, transformers, metering point and meters. JEC will use a building inspector, state regulators and energy efficiency services to assess the condition of their building on a 5-year rotation. A Weekly visual inspection by employees and a yearly state vehicle inspection will be used to assess the condition of the Bucket truck and meter reading truck