

Capital Improvement Plan

FY 2024-2025

Project Title:		Substation Load Tap Chgr Upgrade			Munis Project Code:		EUCP-21009		#123
Section I: Description				District Nos:	Citywide	Project Length	6/30/2028	Priority	Normal
<p>Phase I of this project includes refurbishing 3 Load Tap Changers - Henning Substation - (2) - UZD Style, Killelea Substation - (1) - UTT Style; Phase II includes refurbishing 2 Load Tap Changers and oil leaks as well as replacing vacuum bottles at Industrial Substation Bank #3 and McLane Substation Bank 1 in addition to replacing 1 set of transformer bushings at Henning Substation Bank #2.</p> <p>Phase III includes upgrading all eight (8) LTC controllers and installing tap position sensors to provide greater monitoring and operability of all substation LTC's. This controller will match our current standard of equipment going forward.</p>									
Justification/factor driving project									
<p>Load Tap Changers coming to end of lifetime operations. Refurbishing them will extend the life of station transformers and possibly avoid catastrophic equipment failures. Phase I of this project will postpone the need to replace the Killelea Bank 2 Power Transformer previously planned for FY 21. For Phase II, 2 Load Tap Changers are leaking oil, one into the transformer and one from the gearbox - requiring maintenance and remediation. Transformer bushings have also been found to be in need of replacement.</p>									
Additional Information									
<p>Load Tap Changers are the non-static devices connected to the station transformers that keep the voltage steady as the system load increases and decreases. Transformer bushings connect conductors to lower voltage to system levels. Professional oversight services will perform all major repairs and replacements with internal staff assistance. Efforts on this project have been pushed out a year to focus on higher priority substation related efforts. FY 25 MY reduction to re-evaluate and incorporate into substation maintenance efforts as part of FY 26 budget.</p>									
Section II: Estimated Project Costs									
Expenditure	Prior Years	FY 23/24 Estimate	FY 24/25 Budget	FY 25/26	FY 26/27	FY 27/28	FY 28/29	Future Yrs	Total
Internal Staff	\$ 193,921	\$ 20,000	\$ 10,000	\$ 20,000	\$ 20,000	\$ 20,000			\$ 283,921
Contracts	\$ 73,316	\$ 35,000	\$ -	\$ 20,000	\$ 20,000	\$ 20,000			\$ 168,316
Miscellaneous	\$ 134,169	\$ 17,000	\$ 6,151	\$ 10,000	\$ 10,000	\$ 10,000			\$ 187,320
Total Capital Costs	\$ 401,406	\$ 72,000	\$ 16,151	\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ 639,557
Section III: Funding Sources/Methods of Financing									
Funding Source(s)	Prior Years	FY 23/24 Estimate	FY 24/25 Budget	FY 25/26	FY 26/27	FY 27/28	FY 28/29	Future Yrs	Total
501 - EU Outlay Capital Reserve Fund	\$ 401,406	\$ 72,000	\$ 16,151	\$ 50,000	\$ 50,000	\$ 50,000			\$ 639,557
Total Project Financing	\$ 401,406	\$ 72,000	\$ 16,151	\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ 639,557