

El Paso Electric, Inc.														
Newman Unit 2														
Burns & McDonnell Project No. 101955														
Condition Assessment & Life Extension Assessment - 2027														
Capital Expenditures and Maintenance Forecasts														
All costs are presented in 2017\$, no inflation is included														
CAPITAL EXPENDITURES (Presented in \$000)														
DESCRIPTION	Type	LAST	FREQUENCY	NEXT	TOTAL	2018	2019	2020	2021	2022	2023	2024	2025	2026
BOILER & HIGH ENERGY PIPING														
Boiler clean	Cap	2011	10 yrs	When due	\$600					\$600				
Regular boiler piping replacements	Cap	2016	3 yrs	When due	\$2,000					\$1,000			\$1,000	
Main steam piping replacement	Cap	N/A	Once	ASAP	\$0									
NDE of selected areas	Cap	N/A	3yrs	ASAP	\$220				\$110			\$110		
Replace air heater cold end baskets	Cap	N/A	10 yrs	Within 5 yrs*	\$400							\$400		
TURBINE GENERATOR														
STG Major Inspection	Cap	2013	6 yrs	When due	\$1,600								\$1,600	
STG Major Inspection	Exp	2013	6 yrs	When due	\$1,600								\$1,600	
ST blades/valve repl./repairs	Cap	N/A	Once	Next major	\$0									
Valve Inspection	Exp	N/A	4 yrs	Next major	\$2,400					\$1,200		\$1,200		
Generator rewind	Cap	N/A	Once	Within 5 yrs*	\$3,500					\$3,500				
BALANCE OF PLANT														
Refurbish cooling tower	Exp	N/A	Once	Within 5 yrs*	\$2,000								\$2,000	
Add liner to UG circulating water pipe	Exp	N/A	Once	Within 5 yrs*	\$500								\$500	
Replace FW heater tube bundles	Cap	N/A	Once	Within 5 yrs*	\$500								\$500	
Condenser retubing	Cap	N/A	Once	Within 5 yrs*	\$1,500					\$1,500				
Allowance for major pump/fan work	Exp	N/A	Once	Within 5 yrs*	\$1,000					\$1,000				
ELECTRICAL & CONTROLS														
Switchgear upgrade	Cap	N/A	Once	Within 5 yrs*	\$1,000						\$1,000			
Replace station batteries	Cap	2000	20 yrs	When due	\$200							\$200		
Replace GSU	Cap	N/A	Once	Within 5 yrs*	\$0									
Replace unit aux. transformer	Cap	N/A	Once	Within 5 yrs*	\$500						\$500			
TOTAL														
TOTAL - Capital					\$12,020				\$110	\$6,600	\$1,500	\$710	\$3,100	\$0
TOTAL - Non Recurring O&M					\$7,500				\$0	\$2,200	\$0	\$1,200	\$4,100	\$0
TOTAL					\$19,520				\$110	\$8,800	\$1,500	\$1,910	\$7,200	\$0
*Distributed over years to spread out expense														

El Paso Electric, Inc.																
Rio Grande Unit 7																
Burns & McDonnell Project No. 101955																
Condition Assessment & Life Extension Assessment - 2027																
Capital Expenditures and Maintenance Forecasts																
All costs are presented in 2017\$, no inflation is included																
CAPITAL EXPENDITURES (Presented in \$000)																
DESCRIPTION	TYPE	LAST	FREQUENCY	NEXT	TOTAL	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
BOILER & HIGH ENERGY PIPING																
Regular boiler piping replacements	Cap	N/A	3 yrs	When due	\$2,000					\$1,000			\$1,000			
Main steam piping replacement	Cap	N/A	Once	Within 5 yrs*	\$0											
NDE of selected areas	Cap	N/A	3yrs	ASAP	\$220				\$110			\$110				
Replace air heater cold end baskets	Cap	2011 (insp.)	10 yrs	Within 5 yrs*	\$400							\$400				
TURBINE GENERATOR																
STG Major Inspection	Cap	2005	6 yrs	ASAP	\$3,200					\$1,600		\$1,600				
STG Major Inspection	Exp	2005	6 yrs	ASAP	\$3,200					\$1,600		\$1,600				
ST blades/valve repl./repairs	Cap	N/A	Once	Next major	\$2,000					\$2,000						
Valve Inspection	Exp	2016	4 yrs	When due	\$2,400					\$1,200		\$1,200				
Generator rewind	Cap	N/A	Once	ASAP	\$0				\$0							
Comply with TDP-1	Cap	N/A	Once	ASAP	\$0											
BALANCE OF PLANT																
Reurbish cooling tower	Exp	N/A	Once	Within 5 yrs*	\$1,500					\$1,500						
Add liner to UG circulating water pipe	Exp	N/A	Once	Within 5 yrs*	\$1,000					\$1,000						
Replace FW heater tube bundles	Cap	N/A	Once	Within 5 yrs*	\$1,500					\$1,500						
Condenser retubing	Cap	Unknown	Once	Within 5 yrs*	\$1,500					\$1,500						
Allowance for major pump/fan work	Exp	N/A	Once	Within 5 yrs*	\$1,000					\$1,000						
ELECTRICAL & CONTROLS																
Switchgear upgrade	Cap	N/A	Once	Within 5 yrs*	\$1,000					\$1,000						
Replace station batteries	Cap	2005	20 yrs	When due	\$200							\$200				
Replace unit aux. transformers	Cap	N/A	Once	Within 5 yrs*	\$500				\$500							
TOTAL																
TOTAL - Capital					\$12,520				\$610	\$8,600	\$0	\$2,310	\$1,000	\$0	\$0	
TOTAL - Non Recurring O&M					\$9,100				\$0	\$6,300	\$0	\$2,800	\$0	\$0	\$0	
TOTAL					\$21,620				\$610	\$14,900	\$0	\$5,110	\$1,000	\$0	\$0	
*Distribubted over years to spread out expense																
FIXED OPERATIONS & MAINTENANCE EXPENDITURES - HISTORICAL BASIS																
DESCRIPTION	UNITS	TOTAL	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027				
Unit Capacity (Net Summer)	48															
Fixed O&M (\$/kW-yr)	\$26.60	\$000				\$1,277	\$1,277	\$1,277	\$1,277	\$1,277	\$1,277	\$1,277				
		Total (\$000)	Total (\$/kW)													
		Capital expenditures	260.83													
		Maintenance	186													
		Total	447													
FIXED OPERATIONS & MAINTENANCE EXPENDITURES - ADJUSTED FOR AGE BASED DEGRADATION																
DESCRIPTION	UNITS	TOTAL	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027				
Unit Capacity (Net Summer)	48															
Year in Service	1958															
O&M Aging Rate/year	1.25%					\$27.60	\$27.95	\$28.30	\$28.65	\$29.01	\$29.37	\$29.74				
Maintenance (\$/kW-yr)	\$26.60	\$000				\$1,325	\$1,342	\$1,358	\$1,375	\$1,393	\$1,410	\$1,428				
		Total (\$000)	Total (\$/kW)													
		Capital expenditures	261													
		Maintenance	201													
		Total	461													
VARIABLE OPERATION & MAINTENANCE EXPENDITURES																
DESCRIPTION	UNITS	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027					
Unit Capacity (Net Summer)	48															
Annual Capacity Factor	24.2%															
Variable O&M Costs (\$/MWh)	\$4.68				\$4.68	\$4.68	\$4.68	\$4.68	\$4.68	\$4.68	\$4.68					
Annual Variable O&M Costs (\$)					\$476,219	\$476,219	\$476,219	\$476,219	\$476,219	\$476,219	\$476,219					
SUMMARY																
TOTAL - Capital		\$12,520	\$0	\$0	\$0	\$610	\$8,600	\$0	\$2,310	\$1,000	\$0	\$0				
TOTAL - Non Recurring O&M		\$9,100	\$0	\$0	\$0	\$0	\$6,300	\$0	\$2,800	\$0	\$0	\$0				
Fixed O&M (adjusted for age)		\$9,630	\$0	\$0	\$0	\$1,325	\$1,342	\$1,358	\$1,375	\$1,393	\$1,410	\$1,428				
Variable O&M		\$0	\$0	\$0	\$476,219	\$476,219	\$476,219	\$476,219	\$476,219	\$476,219	\$476,219	\$476,219				
		\$16,064				FOM (K\$)	\$7,658	\$4,175	\$1,393	\$1,410	\$1,428					
FOM Costs - consumables left out since extensions will not be operable until 2023																
Non-Recurring O&M Costs - Omar said to add them all into year 2023 with that year's FO&M Costs																