EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
TX SCHEDULE H-05.03B: FOSSIL CAPITAL EXPENDITURES (HISTORICAL, PRESENT, PROJECTED)
SPONSOR: DAVID RODRIGUEZ
PREPARER: MAGDALENA RODRIGUEZ/CHAD KLINE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 [1]	2025	2026	2027	Total
1	NEWMAN - UNIT 1										
2	GN285: NEWMAN UNIT1 MED VOLTAGE/LOW VOLTAGE SWITCHGEAR UPGRADE	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,655,265	$ 658,668	$ -	$ 2,313,933
3	GN003: NEWMAN CAPITAL IMPROVEMENTS BLANKET	493,876	404,715	202,189	246,580	200,467	181,308	6,731	6,718	6,750	1,749,333
4	GN327: NEWMAN UNIT 1 CROSSOVER/HPIP GLAND SEAL REPLACEMENT	-	-	-	-	4,091	1,151,748	-	-	-	1,155,839
5	GN195: UNIT 1 - MAJOR VALVE CAPITAL IMPROVEMENTS	-	-	768,414	103	(1)	-	-	-	-	768,515
6	GN316: NEWMAN UNIT 1 CROSSOVER BELLOWS REPLACEMENT	-	-	-	111,930	359,103	(4,803)	-	-	-	466,230
7	GN181: NEWMAN UNIT 1 COOLING TOWER SOFT STARTS REPLACEMENTS	115,694	103,191	-	-	-	-	-	-	-	218,885
8	N/A OTHER CAPITAL PROJECTS - NEWMAN UNIT 1	57,632	(1,190)	-	44,568	(8,010)	(16,824)	16	10	-	76,102
9	TOTAL	$ 667,101	$ 506,717	$ 970,602	$ 403,181	$ 555,649	$ 1,311,429	$ 1,662,012	$ 665,397	$ 6,750	$ 6,748,838

[1] Year 2024 includes actuals for the nine months ended September 30, 2024 and Q4 2024 Projected capital expenditures.

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FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 [1]	2025	2026	2027	Total
1	NEWMAN - UNIT 2										
2	GN301: NEWMAN UNIT 2 DISTRIBUTED CONTROL SYSTEM UPGRADE	$ -	$ -	$ -	$ 142,020	$ 2,773,277	$ 3,974,909	$ 238,977	$ -	$ -	$ 7,129,183
3	GN286: NEWMAN UNIT 2 MED VOLTAGE/LOW VOLTAGE SWITCHGEAR UPGRADE	-	-	-	-	-	-	2,543,598	321,614	-	2,865,213
4	PN149: NEWMAN UNIT 2 6 YR LIFE EXTENSION-2021 IRP	-	-	-	-	-	-	-	2,734,451	-	2,734,451
5	GN003: NEWMAN CAPITAL IMPROVEMENTS BLANKET	493,340	230,729	23,811	803,497	293,551	397,240	10,785	10,247	10,294	2,273,493
6	GN299: NEWMAN UNIT 2 BOILER BIFURCATION REPLACEMENT	-	-	-	1,073,610	13,320	-	-	-	-	1,086,931
7	GN305: NEWMAN UNIT 2 BOILER CHEMICAL TREATMENT	-	-	-	-	-	-	-	629,637	-	629,637
8	GN217: NEWMAN UNIT 2 AUTO VOLTAGE REGULATOR UPGRADE	143,881	128,289	-	-	-	-	-	-	-	272,169
9	GN222: NEWMAN UNIT 2 UNINTERUPTIBLE POWER UPGRADE	186,022	69,134	-	-	-	-	-	-	-	255,156
10	GN238: NEWMAN UNIT 2 LP TURBINE PACKING REPLACEMENT	-	224,659	-	-	-	-	-	-	-	224,659
11	GN228: NEWMAN UNIT 2 GENERATOR PROTECT RELAY UPGRADE	65,120	129,063	-	-	-	-	-	-	-	194,183
12	N/A OTHER CAPITAL PROJECTS - NEWMAN UNIT 2	4,731	(3,990)	(20,275)	3,743	32,966	12,536	192	192	55	30,150
13	TOTAL	$ 893,093	$ 777,884	$ 3,536	$ 2,022,870	$ 3,113,115	$ 4,384,685	$ 2,793,553	$ 3,696,141	$ 10,350	$ 17,695,226

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PREPARER: MAGDALENA RODRIGUEZ/CHAD KLINE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 [1]	2025	2026	2027	Total
1	NEWMAN - UNIT 3										
2	GN321: NEWMAN UNIT 3 MAJ INSP CAP IMPRVMNTS	$ -	$ -	$ -	$ -	$ 8,330,594	$ 3,592,938	$ -	$ -	$ -	$ 11,923,532
3	GN243: NEWMAN UNIT 3 AIR PREHEATER ROTOR REPLACEMENT	-	-	510,101	4,572,746	10,330	-	-	-	-	5,093,178
4	GN003: NEWMAN CAPITAL IMPROVEMENTS BLANKET	286,510	174,946	402,868	617,675	1,660,912	823,221	180	179	180	3,966,671
5	GN256: NEWMAN UNIT 3 SWITCHGEAR&MTR CTRL CNTR UPGR	-	-	-	-	-	399,148	2,056,619	191,563	-	2,647,329
6	GN258: NEWMAN UNIT 3 BOILER ECONOMIZER SECTION REP	-	607,844	1,355,701	-	-	-	-	-	-	1,963,545
7	GN257: NEWMAN UNIT 3 BOILER REHEAT SECTION REPLACE	-	358,070	1,042,413	130,797	(20,443)	-	-	-	-	1,510,837
8	GN207: NEWMAN UNIT 3 BOILER PARTS REPLCMNTS	-	614,744	870,332	(1,586)	-	-	-	-	-	1,483,490
9	GN310: NEWMAN UNIT 3 BOILER BIFURCATION REPLACEMNT	-	-	-	139,881	1,111,611	-	-	-	-	1,251,492
10	GN242: NEWMAN UNIT 3 CONDENSER VACUUM PUMP REPLACEMENT	-	-	-	-	-	415,196	327,438	-	-	742,634
11	GN337: NEWMAN UNIT 3 OVATION EVERGREEN UPGRADE	-	-	-	-	-	-	512,054	203,503	-	715,557
12	GN320: NEWMAN 3 FIRE	-	-	-	-	231,947	431,723	-	-	-	663,670
13	GN256: NEWMAN UNIT 3 SWITCHGEAR&MTR CTRL CNTR UPGR	-	-	478	1,239	35,999	561,287	29,974	1,227	-	630,204
14	GN268: NEWMAN UNIT 3 BULLNOSE SECTION REPLACEMENT	-	-	461,413	-	7,560	-	-	-	-	468,973
15	GN174: NW UNIT 3 DCS UPGRADE	433,637	(6,914)	-	-	-	-	-	-	-	426,723
16	GN203: NEWMAN UNIT 3 COOLNG TOWER STRUCT IMPRVMNT	327,420	-	(3,248)	-	-	-	-	-	-	324,171
17	PN166: NEWMAN UNIT 3 VALVE CAP IMPRVMENTS	-	-	-	-	-	-	-	-	323,184	323,184
18	GN219: NEWMAN UNIT 3 UNINTERRUPTIBLE SUPPLY UPGR	177,904	81,032	-	-	-	-	-	-	-	258,936
19	GN218: NEWMAN UNIT 3 AUTO VOLT REGULATOR UPGRADE	144,111	95,005	-	-	-	-	-	-	-	239,116
20	GN204: NEWMAN UNIT 3 SPARE BFP ROTATING ELEMENT	127,968	-	-	-	-	-	-	-	-	127,968
21	GN259: NEWMAN UNIT 3 FEEDWATER REGLTR KIT REPLACEMENT	-	59,200	63,928	-	-	-	-	-	-	123,128
22	N/A OTHER CAPITAL PROJECTS - NEWMAN UNIT 3	(115)	1,161	(1,161)	5,409	4,323	35,004	702	13	12	45,349
23	TOTAL	$ 1,497,433	$ 1,985,088	$ 4,702,824	$ 5,466,161	$ 11,372,834	$ 6,258,516	$ 2,926,966	$ 396,485	$ 323,377	$ 34,929,686

[1]: Year 2024 includes actuals for the nine months ended September 30, 2024 and Q4 2024 Projected capital expenditures.

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FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 [1]	2025	2026	2027	Total
1	NEWMAN - UNIT 4										
2	PN174: NW U4 GT2 TURBINE INLET COOLNG SYS UPGRADE	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 16,086,920	$ 4,996,299	$ 21,083,219
3	PN178: NW 4GT1 TURBINE INLET AIR COOLNG SYS UPGRADE	-	-	-	-	-	-	-	16,086,920	4,996,299	21,083,219
4	GN319: NW U4 STEAM TURBINE MAJOR CAPITAL REPLACEMENT	-	-	-	-	1,005,701	10,115,492	-	-	-	11,121,194
5	GN276: NW U4 GT1 SPARE TURBINE COMPONENTS	-	-	3,195,165	998,738	6,835,422	-	-	-		11,029,325
6	GN277: NW U4 GT2 SPARE TURBINE COMPONENTS	-	-	3,195,165	4,179,423	3,610,100	-	-	-	-	10,984,688
7	GN191: NW U4/GT1 HOT GAS PATH CAPITAL IMPROVEMENT	4,442,880	4,928,252	-	-	-	-	-	-		9,371,132
8	GN210: UNIT 4/GT1 & GT1 CAPITAL TURBINE REPLACE PART	2,009,997	4,990,187	-	-	-	-	-	-	-	7,000,184
9	GN289: NW U4/GT2 2ND SPARE ROTOR ACQUIRE	-	-	1,678,209	54,040	148,661	4,876,912	-	-		6,757,822
10	GN322: NW U4GT1 MAJ INSPECTION CAPITAL IMPROVEMENTS	-	-	-	-	-	6,734,910	-	-	-	6,734,910
11	GN269: NW U4/GT1 501B SPARE BLADED ROTOR	-	-	1,678,209	56,714	160,135	4,742,073	-	-		6,637,131
12	GN323: NW U4GT2 MAJOR INSPECTION - CAPITAL IMPROVEMENTS	-	-	-	-	5,577	5,098,303	-	-	-	5,103,880
13	GN186: NW U4 STEAM INSTRUMENTATION UPGRADE	942,521	2,157,177	542,323	-	(1,909)	-	-	-		3,640,113
14	GN003: NEWMAN CAPITAL IMPROVEMENTS BLANKET	751,102	830,380	967,675	778,590	210,258	36,608	624	622	626	3,576,483
15	GN185: NW U4 GT1 INSTRUMENTATION UPGRADES	947,377	1,843,222	516,923	-	(4)	-	-	-		3,307,518
16	GN184: NW U4 GT2 INSTRUMENTATION UPGRADES	868,579	1,884,654	482,999	-	(14,210)	-	-	-	-	3,232,023
17	GN253: NWU4/GT2 SWITCHGEA0R MOTOR CONTROL CENTER UPGRADE	-	-	-	-	29,458	91,637	762,587	1,653,883		2,537,565
18	GN251: NW U4/ST SWITCHGEAR MOTOR CONTROL CENTER UPGRADE	-	-	-	-	-	160,728	722,833	1,493,500	-	2,377,061
19	GN252: NWU4/GT1 SWITCHGEAR MOTOR CONTROL CENTER UPGRADE	-	-	-	-	28,737	115,992	549,054	1,621,719		2,315,502
20	GN192: NW U4/GT2 HOT GAS PATH CAPITAL IMPROVEMENT	-	1,752,589	105,920	-	-	-	-	-	-	1,858,509
21	GN304: NW U4 ELECTRICAL SYSTEM REPLACEMENT	-	-	-	-	-	-	-	1,604,560	-	1,604,560
22	GN183: NW U4 F BUS SWITCHGEAR UPGRADE	-	-	-	-	-	31,540	1,069,231	438,021	-	1,538,792
23	GN190: NW U4/GT2 COMBUSTOR INSPECTION CAPITAL	347,924	753,861	-	-	-	-	-	-		1,101,785
24	GN147: U4 ST NEW VACUUM PUMP SYSTEM	3,463	295,866	107,018	16,843	134,291	537,205	-	-	-	1,094,686
25	GN308: NW U4 SAMPLE PANELS UPGRADE	-	-	-	-	562,828	488,244	75,000	-		1,126,072
26	GN124: NEW ECONOMIZER / HEADER REPLACEMENT G2	8,726	851,232	(0)	-	-	-	-	-	-	859,957
27	GN128: NEW LOW PRESSURE SECTION (G2)	-	848,719	-	-	-	-	-	-		848,719
28	GN189: NW U4/GT1 COMBUSTOR INSPECTION CAPITAL	-	811,704	-	-	-	-	-	-	-	811,704
29	GN336: NW U4 OVATION EVERGREEN UPGRADE	-	-	-	-	-	-	625,281	83,767		709,048
30	PN168: NW U4 MAJOR INSPECTION CAPITAL IMPROVEMENTS	-	-	-	-	-	-	-	-	645,526	645,526
31	GN220: NW U4 HALON FIRE SYSTEM UPGRADE	-	591,235	13,117	-	-	-	-	-	-	604,352
32	GN315: NW U4 MECH SKID FIRE SYSTEM UPGRADE	-	-	-	162,153	273,623	149,900	-	-	-	585,677
33	PN167: NW U4GT1 HOT GAS PATH CAPITAL IMPROVEMENT	-	-	-	-	-	-	-	472,599	-	472,599
34	PN116: NW U4/GT2 HOT GAS PATH CAPITAL IMPROVEMENTS	-	-	-	-	-	-	-	-	450,000	450,000
35	N/A OTHER CAPITAL PROJECTS - NEWMAN UNIT 4	22,237	191,164	(130,552)	88,336	67,542	78,598	81,253	4,273	-	402,850
36	GN229: NW U4 GT1 COMBUSTOR REPLACEMENTS	-	-	380,060	296	6,232	-	-	-	-	386,588
37	GN223: NW U4 UNINTERUPTIBLE POWER UPGRADE	-	-	329,654	-	5,401	-	-	-	-	335,055
38	GN230: NW U4 GT2 COMBUSTOR REPLACEMENTS	-	-	292,828	-	4,798	-	-	-	-	297,625
39	GN234: UNIT 4 HRSG1 MANUAL CHECK VALVE REPLACEMENT	-	6,610	91,778	87,017	86,100	-	-	-	-	271,505
40	PN115: NW U4/GT1 COMBUSTOR CAPITAL IMPROVEMENTS	-	-	-	-	-	-	110,000	-	125,000	235,000
41	GN216: NW U4 SOFT STARTERS TO VFD UPGRADE	54,349	80,328	64,571	-	-	-	-	-	-	199,248
42	GN236: NW U4 HRSG2 REPLACE MANUAL CHECK VALVE	-	-	4,360	86,513	85,918	-	-	-	-	176,791
43	GN237: NW U4 HRSG2 REPLACE POWER CHECK VALVE	-	88,253	76,059	-	-	-	-	-		164,312
44	GN007: NEWMAN FACILITY SERVICES BLANKET	126,106	-	-	-	-	29,707	-	-	-	155,813
45	GN263: NW U4 GT1 GENERATOR HYDROGEN COOLER REPLACEMENT	-	134,077	-	-	-	-	-	-		134,077
46	GN221: NWU4 TRANSFORMER COOLING TOWER REPLACEMENT	104,640	28,085	-	-	-	-	-	-	-	132,725
47	GN264: NW U4 GT2 GENERATOR HYDROGEN COOLER REPLACEMENT	-	122,582	(60)	-	-	-	-	-		122,522
48	GN279: NW U4 HIGH PRESSURE CIRCULATING SPARE PUMP	-	-	-	120,673	-	-	-	-	-	120,673
49	GN183: NW U4 F BUS SWITCHGEAR UPGRADE	6,672	30,355	74,312	579	-	1,638	5,682	1,163		120,402
50	PN119: NW U4/GT2 COMBUSTOR CAPITAL IMPROVEMENTS	-	-	-	-	-	-	-	120,000	-	120,000
51	TOTAL	$ 10,636,572	$ 23,230,530	$ 13,665,732	$ 6,629,915	$ 13,244,662	$ 33,289,489	$ 4,001,545	$ 39,867,947	$ 11,213,749	$ 155,580,141

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(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 [1]	2025	2026	2027	Total
1	NEWMAN - UNIT 5										
2	PN175: NW U5 GT3 TURB INLT COOLNG SYS UG	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,350,000	$ 4,650,000	$ 20,000,000
3	PN176: NW U5 GT4 TURB INLT COOLING SYS UG	-	-	-	-	-	-	-	15,350,000	4,650,000	20,000,000
4	GN003: GEN-NEWMAN BLANKET	1,121,010	317,812	142,952	711,577	2,045,477	1,023,968	11,298	8,842	8,882	5,391,820
5	GN198: NW U5 HRSG BYPASS VALVE REPLACEMENT	2,295,189	240,366	37,163	53,262	22,738	1,961,242	-	-		4,609,961
6	PN148: NW U5/GT4 SPARE PARTS	-	-	-	-	-	-	-	4,200,000	-	4,200,000
7	PN153: NW U5/GT3 SPARE PARTS	-	-	-	-	-	-	-	-	4,200,000	4,200,000
8	GN291: NW U5HRGS3 LOW PRESS EVAP SEC UPGRA	-	-	1,532,031	1,762,073	31,457	-	-	-	-	3,325,560
9	GN292: NW U5HRSG4 LOW PRESS EVAP SEC UPGRA	-	-	1,532,052	1,661,059	38,853	-	-	-		3,231,964
10	GN265: NWU5 GT3/GT4 TURBINE BLADES REPLACE	-	-	1,126,512	1,522,739	205,462	532,334	-	-	-	3,387,047
11	GN314: NW U5 GT3 SPARE PARTS	-	-	-	-	-	4,695,458	500,000	-		5,195,458
12	GN199: NW U5 HRSG 4 BYPASS VALVE REPLACMNT	1,415,827	248,689	34,306	37,319	22,027	1,887,981	-	-	-	3,646,149
13	GN333: NW U5ST MAJOR CAP IMPRVMNTS	-	-	-	-	-	-	395,267	1,750,000		2,145,267
14	GN254: NWU5/HRSG3 BOILERFEED WATER CNTRLV	-	-	200,106	390,538	1,668,488	(28)	-	-	-	2,259,104
15	GN280: NW U5GT4 MAJOR OUTAGE CAPITAL REPL	-	-	-	-	2,177,027	4,609	-	-		2,181,636
16	GN325: NW U5GT3 MAJOR INSPECTION CAPITAL IMPROVEMENTS	-	-	-	-	-	602,000	1,407,000	-	-	2,009,000
17	GN293: NW5 HRGS3 RH3 LOWER HEADER REPLACE	-	-	-	549,203	1,169,670	(55,858)	-	-		1,663,014
18	GN295: U5HRSG4 BLR FEED WTR CNTRL VLVE REP	-	-	-	17,531	1,405,899	(53,796)	-	-	-	1,369,634
19	GN294: NW5 HRSG4 RH3 LOWER HEADER REPLACEM	-	-	-	1,492	1,378,364	(27,412)	-	-		1,352,443
20	GN335: NW U5 OVATION EVERGREEN UPGRADE	-	-	-	-	-	-	756,000	420,000	-	1,176,000
21	GN267: NW U5ST LOW PRESSURE SPARE BLADES	-	-	-	1,100,763	18,035	-	-	-		1,118,798
22	GN328: NM5 COMPUTERIZED BASED TRAINING	-	-	-	-	998,350	57,030	-	-	-	1,055,380
23	PN123: NW U5/GT3 HOT GAS PATH - CAP IMP	-	-	-	-	-	-	-	-	1,050,000	1,050,000
24	PN124: NW U5/GT4 HOT GAS PATH - CAP IMP	-	-	-	-	-	-	-	1,050,000	-	1,050,000
25	GN161: NEWMAN 5 STEAM TURBINE UPGRADES	1,010,950	-	(10,065)	-	-	-	-	-		1,000,885
26	GN339: NW U5GT4 ADVND 2ND FUEL NOZE (ASFN)	-	-	-	-	-	-	392,452	347,280	196,031	935,763
27	GN340: NW U5GT3 ADVND 2ND FUEL NOZE (ASFN)	-	-	-	-	-	-	392,452	347,280	196,031	935,763
28	PN120: NW U5/ST MAJOR TURB/GEN - CAP IMP	-	-	-	-	-	-	-	900,000	-	900,000
29	GN193: NW U5/GT3 HOT GAS PATH CAP IMPRVMNT	-	-	811,649	8,342	-	-	-	-		819,990
30	GN187: NW U5 INSTRUMENT AIR COMPRESS REPLC	616,255	195,877	-	-	-	-	-	-	-	812,131
31	GN211: U5/GT3 & GT4 CAP GE 7EAS REPL PARTS	-	790,660	-	-	-	-	-	-		790,660
32	GN177: GT3 GT CONTROLS AND AVR UPGRADE	740,482	-	-	-	-	-	-	-	-	740,482
33	GN309: NW U5 SAMPLE PANELS UPGRADE	-	-	-	-	-	691,693	-	-		691,693
34	GN178: GT4 GT CONTROLS AND AVR UPGRADE	676,966	-	-	-	-	-	-	-	-	676,966
35	GN226: NW U5 CARBON DIOXIDE SYSTEM UPGRADE	-	-	501,873	-	-	-	-	-		501,873
36	GN309: NW U5 SAMPLE PANELS UPGRADE	-	-	-	-	-	3,150	314,989	-	-	318,139
37	GN007: GEN-NEWM-FACILITY SERV BLKT	-	-	76,432	55,697	129,743	31,927	-	-		293,799
38	GN270: NW U5/GT3 CONTS EMMSN MNTR SYST UPG	-	-	-	169,234	104,506	(6,361)	-	-	-	267,379
39	GN271: NW U5/GT4 CONTS EMMSN MNTR SYST UPG	-	-	-	160,536	94,896	(5,344)	-	-		250,088
40	GN162: NEWMAN UNIT 5 STG CAPITAL PROJECT	226,301	-	-	-	-	-	-	-	-	226,301
41	GN201: U5 HRSG SPARE BFP ROTATING ELEMENT	212,491	-	-	-	-	-	-	-		212,491
42	GN287: NW U4 CONTROL VALVE REPLACEMENT	-	-	-	-	-	-	-	-	179,134	179,134
43	GN202: NWU5 HRSG VARIABLE SPEED DRIVE-BFP	167,485	-	-	-	-	-	-	-		167,485
44	GN209: U5/GT3 BOILER FEED PUMP UPGRADE	161,997	-	-	-	-	-	-	-	-	161,997
45	GN278: NW U5 GT BOIL FEED PUMP SPARE MOTOR	-	-	-	132,379	2,169	-	-	-		134,548
46	GN302: NW U5 HRSG3 DESUPERHEATER REPLACE	-	-	-	-	111,539	(1,963)	-	-	-	109,576
47	GN303: NW U5 HRSG4 DESUPERHEATER REPLACE	-	-	-	-	111,332	(1,963)	-	-		109,369
48	N/A OTHER CAPITAL PROJECTS - NEWMAN UNIT 5	(70,749)	(15,843)	(635,124)	-	208	52,525	(3)	(3)	(3)	(668,994)
49	TOTAL	$ 8,574,204	$ 1,777,581	$ 5,349,888	$ 8,333,742	$ 11,736,241	$ 11,391,190	$ 4,169,455	$ 39,723,399	$ 15,130,076	$ 106,185,776

[1]: Year 2024 includes actuals for the nine months ended September 30, 2024 and Q4 2024 Projected capital expenditures.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
TX SCHEDULE H-05.03B: FOSSIL CAPITAL EXPENDITURES (HISTORICAL, PRESENT, PROJECTED)
SPONSOR: DAVID RODRIGUEZ
PREPARER: MAGDALENA RODRIGUEZ/CHAD KLINE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 (1)	2025	2026	2027	Total
1	NEWMAN - UNIT 6										
2	GN208: NEWMAN 6 - GT 5	$ 6,837,031	$ 17,638,104	$ 60,576,575	$ 64,007,175	$ 62,541,055	$ 5,698,357	$ -	$ -	$ -	$ 217,298,296
3	PN177: NW U6 GT5 TURBINE INLET COOLING SYSTEM UPGRADE	-	-	-	-	-	-	-	16,086,920	4,996,299	21,083,219
4	GN282: NW U6 VARIOUS CAPITAL REPLACEMENTS	-	-	-	275,636	80,140	3,993,810	1,802,376	1,914,639	2,050,355	10,116,956
5	GN283: NW U6 SPARE GENERATOR STEP-UP	-	-	-	16,492	3,218,987	(126,040)	-	-	-	3,109,439
6	GN331: NW U6 STATIC FREQUENCY CONVERTER - NEW	-	-	-	-	-	151,022	457,714	467,944	-	1,076,680
7	GN284: NW U6 SPARE UNIT AUXILIARY TRANSFORMER	-	-	-	3,815	10,657	775,119	-	-		789,591
8	GN334: NW U6 OVATION EVERGREEN UPGRADE	-	-	-	-	-	-	512,054	204,386		716,439
9	GN317: NWU6, GT-5 TEMPERING AIR FAN MOTOR SPARE	-	-	-	2,726	556,315	-	-	-	-	559,041
10	N/A OTHER CAPITAL PROJECTS - NEWMAN UNIT 6	-	343,094	(6,301)	263,250	(589,111)	51,696	-	-	-	62,628
11	TOTAL	$ 6,837,031	$ 17,981,198	$ 60,570,273	$ 64,569,094	$ 65,818,044	$ 10,543,964	$ 2,772,144	$ 18,673,888	$ 7,046,654	$ 254,812,289

(1): Year 2024 includes actuals for the nine months ended September 30, 2024 and Q4 2024 Projected capital expenditures.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
TX SCHEDULE H-05.03B: FOSSIL CAPITAL EXPENDITURES (HISTORICAL, PRESENT, PROJECTED)
SPONSOR: DAVID RODRIGUEZ
PREPARER: MAGDALENA RODRIGUEZ/CHAD KLINE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 [1]	2025	2026	2027	Total
1	RIO GRANDE - COMMON										
2	GR014: RIO GRANDE CAPITAL IMPROVEMENTS BLANKET	$ 357,764	$ 416,364	$ 280,331	$ 568,124	$ 635,983	$ 574,304	$ 6,386,400	$ 5,785,218	$ 845,946	$ 15,850,434
3	PR115: RG U9 GAS TURBINE HOT SECTION REPLACEMENT	-	-	-	-	-	-	7,099,740	-		7,099,740
4	GR007: RIO GRANDE FACILITY SERVICES BLANKET	402,291	(26,936)	81,418	209,049	424,057	201,507	392,451	205,138	211,488	2,100,473
5	GR212: RIO GRANDE COMMON - ELEVATOR REPLACEMENT	-	-	-	-	-	-	665,370	-	-	665,370
6	GR161: RIO GRANDE ENGINEERING BUILDING EXPANSION	-	1,512	78,698	447,370	62,933	(646)	-	-		589,867
7	GR177: RG DCS CIP CYBER IMPROVEMENTS	331,386	139,148	-	-	-	-	-	-		470,534
8	GR209: RIO GRANDE COMMON - CITY WATER LINE REPLACEMENT	-	-	-	-	-	-	425,300	-	-	425,300
9	GR165: RG WELL WATER PIPING REPLACEMENT	-	414,141	-	-	-	-	-	-	-	414,141
10	GR170: RIO GRANDE EMPLOYEE ACCESS IMPROVEMENT	1,965	365,758	497	4,644	-	-	-	-		372,863
11	GR172: RG WELL #2 RELOCATION	-	250,471	86,730	-	4	-	-	-		337,205
12	GR030: RIO GRANCE GENERAL & INTANGIBLE BLANKET	-	49,113	(7,818)	92,148	108	-	50,915	51,868	52,806	289,140
13	GR204: RIO GRANDE LUNCHROOM IMPROVEMENTS	-	-	-	-	253,541	1,834	-	-	-	255,375
14	GR174: RG PLANT CRANE RAILING UPGRADE	110,777	81,093	-	-	-	-	-	-		191,870
15	GR163: RIO GRANDE RACETRACK DRIVE ENTRANCE	-	-	173,991	418	2,858	-	-	-		177,266
16	GR182: RIO GRANDE PLANT GAS METERING UPGRADE	-	7,687	29,965	94,339	30,354	1,754	-	-	-	164,100
17	N/A OTHER CAPITAL PROJECTS - RIO GRANDE COMMON	35,349	(13,916)	6,899	17,531	27,942	90,766	D	D	0	164,571
18	TOTAL	$ 1,239,531	$ 1,684,436	$ 730,709	$ 1,433,624	$ 1,437,780	$ 869,519	$ 15,020,176	$ 6,042,224	$ 1,110,250	$ 29,568,249

[1]: Year 2024 includes actuals for the nine months ended September 30, 2024 and Q4 2024 Projected capital expenditures.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
TX SCHEDULE H-05.03B: FOSSIL CAPITAL EXPENDITURES (HISTORICAL, PRESENT, PROJECTED)
SPONSOR: DAVID RODRIGUEZ
PREPARER: MAGDALENA RODRIGUEZ/CHAD KLINE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 [1]	2025	2026	2027	Total
1	RIO GRANDE - UNIT 7										
2	GR180: UNIT 7 GENERATOR REWIND/HARDWARE REPLACEMENT	$ -	$ 2,138,333	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,138,333
3	GR014: RIO GRANDE CAPITAL IMPROVEMENTS BLANKET	240,668	11,413	129,686	610,535	781,732	63,369	-	-		1,837,402
4	N/A OTHER CAPITAL PROJECTS - RIO GRANDE UNIT 7	(1,787)	-	-	-	(7)	-	-	-	-	(1,794)
5	Total	$ 238,882	$ 2,149,747	$ 129,686	$ 610,535	$ 781,724	$ 63,369	$ -	$ -	$ -	$ 3,973,941

[1] Year 2024 includes actuals for the nine months ended September 30, 2024 and Q4 2024 Projected capital expenditures.

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 [1]	2025	2026	2027	Total
1	RIO GRANDE - UNIT 8										
2	GR150: RG8 MAJOR HP/IP TURBINE IMPROVEMENTS	$ -	$ -	$ 3,657,652	$ 7,522,912	$ 3,300	$ -	$ -	$ -	$ -	$ 11,183,864
3	GR014: RIO GRANDE CAPITAL IMPROVEMENTS BLANKET	299,722	1,621,415	2,585,020	1,771,081	34,017	486,421	1,407	1,405	1,411	6,801,899
4	GR201: RG UNIT 8 BOILER 2ND SUPERHEAT OUTLET HEADER REPLACEMENT	-	-	-	-	-	268,907	2,739,902	-	-	3,008,809
5	GR200: RG UNIT 8 BOILER LOWER SLOPE REPLACEMENT	-	-	-	-	144,424	2,552,939	-	-		2,697,363
6	GR194: RG UNIT 8 BOILER SECONDARY SUPRHT REPLACEMENT	-	-	5,323	1,877,399	22,487	-	-	-	-	1,905,208
7	GR133: RG UNIT 8 CONTROLS UPGRADE (2017 OUTGAGE)	1,343,521	-	-	-	-	-	-	-		1,343,521
8	GR178: UNIT 8 TURBINE CONTROLS UPGRADE	-	-	-	-	-	-	1,284,668	-	-	1,284,668
9	PR125: RG UNIT 8 DEAREATOR UPGRADE	-	-	-	-	-	-	-	-	1,080,494	1,080,494
10	GR179: U8 AUTOMATIC VOLTAGE REGULATOR UPGRADE	-	60,514	502,662	405,723	27,592	-	-	-	-	996,491
11	GR184: RG UNIT 8 TURBINE BEARING FIRE SYSTEM INSTALLATION	-	1,545	6,227	952,322	-	-	-	-		960,095
12	GR197: RG UNIT 8 BOILER ARCH TUBE REPLACEMENT	-	-	27,744	754,220	12,812	-	-	-	-	794,776
13	GR164: U8 MAIN STEAM HEADER REPLACEMENT	-	-	215,272	538,679	(2,336)	-	-	-		751,615
14	PR121: RG UNIT 8 VALVE INSPECTION CAPITAL IMPROVEMENTS	-	-	-	-	-	-	601,081	25,381	25,370	651,832
15	GR169: RG UNIT 8 DRUM LEVEL UPGRADE	35,280	95,170	422,093	(0)	-	-	-	-		552,543
16	PR113: RG UNIT 8 DISTRIBUTED CONTROL CENTER UPGRADE	-	-	-	-	-	-	-	-	431,317	431,317
17	GR211: RG UNIT 8 FORCED DRAFT FAN UPGRADE	-	-	-	-	-	-	426,831	-		426,831
18	GR203: RG UNIT 8 DISTRIBUTED CONTROL SYSTEM EVERGREEN UPGRADE	-	-	-	-	-	-	425,224	-	-	425,224
19	GR183: RG UNIT 8 COOLING TOWER SWITCHGEAR & MOTOR CONTROL CENTER REPLACEMENT	-	-	154,481	184,054	5,529	4,946	-	-		349,010
20	GR147: U8 THROTTLE VALVE SEAT REPLACEMENT	70,132	-	126,662	141,022	-	(6,574)	-	-	-	331,242
21	GR175: RG UNIT 8 4160V SWITCHGEAR BREAKER UPGRADE	-	294,560	-	-	-	-	-	-		294,560
22	GR176: RG UNIT 8 FEED WATER REGULATORS UPGRADE	10,856	269,912	-	-	-	-	-	-	-	280,768
23	GR171: RG UNIT 8 AUTO SYNCHRONIZER UPGRADE	15,262	71,244	34,800	106,813	-	-	-	-		228,119
24	GR191: RG UNIT 8 CIRCULATNG WATER PUMP MOTOR (SPARE)	-	-	73,356	113,541	3,062	-	-	-	-	189,959
25	GR157: RG UNIT 8 SPARE FORCED DRAFT FAN MOTOR	-	162,883	-	-	-	-	-	-		162,883
26	GR159: RG UNIT 8 BOILER BURNER TUBE REPLACEMENT	160,801	-	-	-	-	-	-	-	-	160,801
27	GR190: RG UNIT 8 TURBINE BELLY DRAIN VALVES REPLACEMENT	-	-	-	152,631	2,214	-	-	-		154,845
28	N/A OTHER CAPITAL PROJECTS - RIO GRANDE UNIT 8	(2,033)	365	8,618	-	-	42,670	109	-	-	49,729
29	TOTAL	$ 1,933,541	$ 2,577,607	$ 7,819,909	$ 14,520,397	$ 253,100	$ 3,349,310	$ 5,479,223	$ 26,785	$ 1,538,592	$ 37,498,465

[1] Year 2024 includes actuals for the nine months ended September 30, 2024 and Q4 2024 Projected capital expenditures.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
TX SCHEDULE H-05.03B: FOSSIL CAPITAL EXPENDITURES (HISTORICAL, PRESENT, PROJECTED)
SPONSOR: DAVID RODRIGUEZ
PREPARER: MAGDALENA RODRIGUEZ/CHAD KLINE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

(1)	(2)	(3) Historical Year	(4) Historical Year	(5) Historical Year	(6) Historical Year	(7) Historical Year	(8) Present/Projected	(9) Projected	(10) Projected	(11) Projected	(12)
Line No.	Project	2019	2020	2021	2022	2023	2024 :::	2025	2026	2027	Total
1	129 RIO GRANDE - UNIT 9										
2	PR126: RG UNIT 9 TURBINE INLET COOLING SYSTEM UPGRADE	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,716,898	$ 5,124,928	$ 15,841,826
3	PR118: RG UNIT 9 INTERMEDIATE PRESSURE TURBINE EXCHANGE REPLACEMENT	-	-	-	-	-	-	4,085,725	-		4,085,725
4	GR187: RG UNIT 9 878-168 INTERMEDIATE PRESSURE TURBINE EXCHANGE	-	-	2,660,413	2,559	43,631	(25,248)	-	-	-	2,681,356
5	GR014: RIO GRANDE CAPITAL IMPROVEMENTS BLANKET	339,088	30,013	154,122	266,633	529,592	195,187	7,389	7,375	7,408	1,535,809
6	GR196: RG UNIT 9 TURBINE UPGRADE -SPARE	-	-	-	960,081	15,730	-	-	-	-	975,812
7	GR213: RG UNIT 9 AMMONIA VAPORIZATION FREE HEAT SYSTEM	-	-	-	-	-	-	554,897	-		554,897
8	GR116: RG UNIT 9 CRITICAL SPARE COMPONENTS	(15,977)	193,505	-	-	32	65,482	132,563	-	-	375,605
9	GR158: RG UNIT 9 SELECTIVE CATALYTIC REDUCTION CARBON MONOXIDE CATALYST REPLACE	372,461	-	-	-	-	-	-	-		372,461
10	PR114: RG UNIT 9 DISTRIBUTED CONTROL SYSTEM UPGRADE	-	-	-	-	-	-	-	-	323,488	323,488
11	GR193: RG UNIT 9 DISTRIBUTED CONTROL SYSTEM UPGRADE	-	-	-	-	-	-	259,858	-		259,858
12	GR149: RG UNIT 9 FUEL GAS PIPE REPLACEMENT RELOCATION	253,019	-	(6,768)	-	-	-	-	-	-	246,251
13	GR156: UNIT 9 HMI HARDWARE UPGRADE	211,182	-	-	-	-	-	-	-		211,182
14	GR186: RG UNIT 9 INSTRUMENT AIR COMPRESS UPGRADE	-	-	203,122	(688)	(120)	-	-	-	-	202,314
15	GR192: RG UNIT 9 CONTINOUS EMMISION MONITORING SYSTEM UPGRADE	-	-	-	2,833	134,972	(12,350)	-	-		125,454
16	GR195: RG UNIT 9 TURBINE UPGRADE	-	-	-	107,222	-	(1,890)	-	-	-	105,332
17	N/A OTHER CAPITAL PROJECTS - RIO GRANDE UNIT 9	988	(120)	57,951	10,811	20,114	6,776	-	-		96,520
18	Total	$ 1,160,761	$ 223,397	$ 3,068,841	$ 1,349,451	$ 742,951	$ 227,958	$ 5,040,432	$ 10,724,273	$ 5,455,826	$ 27,993,890

::: Year 2024 includes actuals for the nine months ended September 30, 2024 and Q4 2024 Projected capital expenditures.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE 6.1a: NUCLEAR UNIT OUTAGE HISTORY
SPONSOR: VICTOR MARTINEZ/CARY HARBOR
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

PALO VERDE GENERATING STATION (A) *

UNIT NAME	OUTAGE NUMBER (D)	DATE STARTED (B)	DATE ENDED (B)	OUTAGE DURATION (Hours)	TYPE OF OUTAGE (Note 1)	MAXIMUM POWER LEVEL PERMITTED (*) (MWs)	UNIT SHUTDOWN METHOD (Note 2)	REASON FOR OUTAGE
PVGS Unit 1	U1R24	10/07/23	11/11/23	851.5	S	0	M	24th Refueling Outage
	U1R24 Extension	11/11/23	11/11/23	11.3	S	0	M	24th Refueling Outage Extension

F = Forced Outage
S = Scheduled Outage

NOTE 2: USE THE FOLLOWING UNIT SHUTDOWN CATEGORIES
AT = Automatic Trip
MT = Manual Trip (Note F)
M = Manual Controlled Shutdown
O = Other

NOTE 1: USE THE FOLLOWING OUTAGE CATEGORIES

* The letters in parentheses refer to additional notes by EPE. Refer to the last page of Schedule H-6.1a for further explanation.

(*) For Downpowers, Maximum Power Level Permitted is calculated using Design Electric Rating.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE 6.1a: NUCLEAR UNIT OUTAGE HISTORY
SPONSOR: VICTOR MARTINEZ/CARY HARBOR
PREPARER: KARA RANDLE
FOR THE RECONCILIATION PERIOD APRIL 2022 THROUGH MARCH 2024

PALO VERDE GENERATING STATION (A) ^

UNIT NAME	OUTAGE NUMBER (D)	DATE STARTED (B)	DATE ENDED (B)	OUTAGE DURATION (Hours)	TYPE OF OUTAGE (Note 1)	MAXIMUM POWER LEVEL PERMITTED [1] (MWs)	UNIT SHUTDOWN METHOD (Note 2)	REASON FOR OUTAGE
PVGS Unit 2	N/A	02/14/24	02/16/24	55.63	F	533.2	M	Commenced RX Power decrease to 40% for condenser 1A Hotwell Tube leak

NOTE 1: USE THE FOLLOWING OUTAGE CATEGORIES
F = Forced Outage
S = Scheduled Outage

NOTE 2: USE THE FOLLOWING UNIT SHUTDOWN CATEGORIES
AT = Automatic Trip
MT = Manual Trip (Note F)
M = Manual Controlled Shutdown
O = Other

^ The letters in parentheses refer to additional notes by EPE. Refer to the last page of Schedule H-6.1a for further explanation.

[1] For Downpowers, Maximum Power Level Permitted is calculated using Design Electric Rating.

PALO VERDE GENERATING STATION (A) *

UNIT NAME	OUTAGE NUMBER (D)	DATE STARTED (B)	DATE ENDED (B)	OUTAGE DURATION (Hours)	TYPE OF OUTAGE (Note 1)	MAXIMUM POWER LEVEL PERMITTED [1] (MWs)	UNIT SHUTDOWN METHOD (Note 2)	REASON FOR OUTAGE
PVGS Unit 3	U3R24	04/05/24	05/12/24	875.75	S	0	M	24th Refueling Outage

NOTE 1: USE THE FOLLOWING OUTAGE CATEGORIES
F = Forced Outage
S = Scheduled Outage

NOTE 2: USE THE FOLLOWING UNIT SHUTDOWN CATEGORIES
AT = Automatic Trip
MT = Manual Trip (Note F)
M = Manual Controlled Shutdown
O = Other

* The letters in parentheses refer to additional notes by EPE. Refer to the last page of Schedule H-6.1a for further explanation.

[1] For Downpowers. Maximum Power Level Permitted is calculated using Design Electric Rating.

PALO VERDE GENERATING STATION

NOTES AND ACRONYMS TO SCHEDULE H-6.1a

El Paso Electric Notes: (All information is from the NRC Monthly Operating Report unless noted otherwise)

(A) Minor reactor power reductions (less than or equal to 5%) required for routine planned maintenance and testing, chemistry control or atmospheric conditions (mugging) are not displayed.

(B) A reduction in power outage is complete when the power level returns to the original power level before the reduction. An outage due to a trip of the Main Turbine or Reactor is complete when the Main Turbine is synchronized to the grid.

(C) Maximum Power Level Permitted - This was interpreted to mean the reliable power level permitted during the reduction.

(D) No outage number available.

(E) Manual Trip definition is a trip that is not automatic and not from a controlled shutdown.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE 6.1b: NUCLEAR UNIT OUTAGE DATA
SPONSOR: VICTOR MARTINEZ/CARY HARBOR
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

PALO VERDE GENERATING STATION: REFUELING AND MID-CYCLE OUTAGES

UNIT NAME	OUTAGE NUMBER (A)	DATE OF COMMERCIAL OPERATION (B)	SCHEDULED START DATE	SCHEDULED END DATE	SCHEDULED LENGTH OF OUTAGE (DAYS)	ACTUAL START DATE	ACTUAL END DATE (D)	ACTUAL LENGTH OF OUTAGE (DAYS)
PVGS1	U1R24	01/28/86	10/07/23	11/11/23	35	10/07/23	11/11/23	35
PVGS3	U3R24	09/19/86	04/05/24	05/12/24	36	04/06/24	05/11/24	35

Notes:
(A) U = Unit; R = Refueling Outage
(B) Nuclear Regulatory Commission Monthly Operating Report
(C) Outage duration is extended due to Main Generator Stator rewinds
(D) Actual End Date is time unit began power ascension

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE H-6.1c: NUCLEAR UNIT OUTAGE PLANNING
SPONSOR: VICTOR MARTINEZ
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

PUBLIC

SCHEDULE H-6.1c is a CONFIDENTIAL and/or HIGHLY SENSITIVE PROTECTED MATERIALS attachment.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE
SCHEDULE H-6.2a: FOSSIL UNIT FORCED OUTAGE HISTORY
SPONSOR: DAVID RODRIGUEZ
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDING SEPTEMBER 30, 2024

UNIT NAME	DATE STARTED	DATE COMPLETE	OUTAGE DURATION HOURS	REASON FOR OUTAGE (1)
Copper	10/23/2023 11:46	10/25/2023 9:45	45.98	Other miscellaneous gas turbine problems
Copper	1/8/2024 15:44	1/8/2024 18:55	3.18	Miscellaneous plant auxiliary process and services instrumentation and controls
Copper	1/8/2024 21:49	1/9/2024 19:50	22.02	Controls and instrumentation
Copper	1/25/2024 9:03	1/25/2024 10:26	1.38	Distributed Control System (DCS)
Copper	1/25/2024 16:38	1/25/2024 18:00	1.37	Turbine overspeed trip test
Copper	2/9/2024 6:11	2/9/2024 13:00	6.82	Miscellaneous plant auxiliary process and services instrumentation and controls
Copper	2/20/2024 11:38	2/20/2024 15:43	4.08	Starting system (including motor)
Copper	3/16/2024 19:04	3/19/2024 17:15	70.18	High engine exhaust temperature
Copper	3/25/2024 12:58	4/2/2024 12:30	191.53	High engine exhaust temperature
Copper	4/23/2024 1:56	4/23/2024 15:09	13.22	Station Service Power Distribution System; General
Copper	5/15/2024 16:45	5/16/2024 14:51	22.10	High pressure casing/expansion joints
Copper	5/21/2024 0:00	6/15/2024 0:00	600.00	Exhaust Stack
Copper	6/15/2024 22:00	6/16/2024 12:44	14.73	High pressure shaft C
Copper	7/14/2024 10:21	8/30/2024 7:29	1125.13	Fuel piping and valves A
Copper	9/8/2024 11:28	9/10/2024 13:52	50.40	Lube oil valves/piping
Copper	9/18/2024 15:13	9/25/2024 12:13	165.00	Lube oil valves/piping
Copper	9/25/2024 12:19	9/27/2024 11:24	47.08	Turbine overspeed trip test
Montana 1	1/4/2024 17:37	1/24/2024 16:37	479.00	Other miscellaneous gas turbine problems
Montana 1	2/12/2024 18:06	2/13/2024 9:00	14.90	Lube oil system general
Montana 1	2/19/2024 16:10	2/20/2024 15:49	23.65	Intercoolers
Montana 1	4/21/2024 11:00	4/21/2024 13:50	2.83	Boroscope inspection A
Montana 1	4/22/2024 17:43	4/23/2024 1:30	7.78	Inlet air vanes/nozzles
Montana 1	4/25/2024 2:41	4/25/2024 3:10	0.48	Operator error
Montana 1	7/15/2024 11:45	7/17/2024 11:54	48.15	Other miscellaneous balance of plant problems
Montana 1	7/17/2024 13:01	7/17/2024 15:17	2.27	Other miscellaneous balance of plant problems
Montana 1	7/21/2024 9:00	7/21/2024 15:30	6.50	Other miscellaneous balance of plant problems
Montana 2	10/17/2023 4:17	10/17/2023 18:30	14.22	Fuel piping and valves A
Montana 2	2/5/2024 4:00	2/6/2024 15:00	35.00	Heat shields
Montana 2	2/6/2024 16:28	2/8/2024 17:52	49.40	Heat shields
Montana 2	2/19/2024 11:45	2/19/2024 21:37	9.87	Heat shields
Montana 2	2/19/2024 22:44	2/22/2024 18:15	67.52	Heat shields
Montana 2	2/24/2024 3:25	2/24/2024 12:00	8.58	SCR NOx Control system
Montana 2	2/24/2024 18:10	2/24/2024 23:00	4.83	SCR NOx Control system
Montana 2	3/2/2024 10:30	3/3/2024 11:30	25.00	Boroscope inspection
Montana 2	4/19/2024 16:03	4/22/2024 10:35	66.53	Fire detection and extinguishing system B
Montana 2	4/22/2024 13:30	4/22/2024 18:02	4.53	Gas fuel system B
Montana 2	5/31/2024 20:07	6/1/2024 9:50	13.72	Other Controls and instrumentation Problems A
Montana 2	6/2/2024 16:34	6/4/2024 13:30	44.93	Other compressor problems
Montana 2	6/11/2024 9:45	6/11/2024 13:30	3.75	Hydraulic oil system A
Montana 2	7/23/2024 11:45	7/23/2024 15:45	4.00	Other miscellaneous balance of plant problems
Montana 2	8/6/2024 17:30	8/8/2024 12:52	43.37	Other miscellaneous balance of plant problems
Montana 3	10/31/2023 10:30	10/31/2023 12:05	1.58	Liquid fuel oil pump A
Montana 3	1/3/2024 10:26	1/3/2024 11:55	1.48	DC instrument power battery chargers
Montana 3	7/21/2024 12:48	7/21/2024 15:56	3.13	Intercoolers A
Montana 3	7/21/2024 19:14	7/22/2024 10:35	15.35	Intercoolers A
Montana 3	8/5/2024 14:45	8/6/2024 12:48	22.05	Hydraulic oil system pumps
Montana 3	8/7/2024 13:40	8/8/2024 10:10	20.50	Other fire protection system problems
Montana 3	8/19/2024 19:38	8/20/2024 9:52	14.23	Intercoolers A
Montana 3	8/20/2024 15:36	8/20/2024 16:00	0.40	DC instrument power battery chargers
Montana 3	8/28/2024 23:34	8/29/2024 18:41	19.12	Auxiliary boiler tube leaks
Montana 3	9/5/2024 11:59	9/6/2024 12:44	24.75	Fire protection system instrumentation and controls
Montana 3	9/16/2024 15:55	9/17/2024 12:50	20.92	Other miscellaneous gas turbine problems
Montana 4	10/17/2023 13:50	10/17/2023 15:10	1.33	Fuel piping and valves A
Montana 4	11/7/2023 13:58	11/12/2023 19:00	125.03	Compressor casing and bolts
Montana 4	1/18/2024 11:00	1/19/2024 19:00	32.00	High pressure nozzles/vanes
Montana 4	5/17/2024 14:01	5/17/2024 15:43	1.70	Lube oil system - general
Montana 4	5/27/2024 11:12	5/27/2024 13:07	1.92	SCR NOx Other ammonia system problems
Montana 4	5/28/2024 6:00	5/28/2024 6:30	0.50	Distributive Control System (DCS) - process computer
Newman 1	11/15/2023 8:05	11/15/2023 9:05	1.00	Instrument air piping
Newman 1	1/8/2024 14:04	3/19/2024 10:39	1700.58	Outer casing
Newman 1	7/30/2024 1:30	8/6/2024 6:27	172.95	Other internal or structural problems
Newman 1	8/9/2024 17:56	8/11/2024 16:32	46.60	Burner management system
Newman 1	9/6/2024 0:35	9/10/2024 8:15	103.67	Circulating water pump motors
Newman 2	11/15/2023 7:49	1/2/2024 0:01	1144.20	Waterwall (Furnace wall)
Newman 2	5/27/2024 15:15	6/3/2024 11:15	164.00	Other Other voltage system problems
Newman 2	6/3/2024 11:28	6/3/2024 19:10	7.70	Inner casing C
Newman 2	6/7/2024 16:28	6/11/2024 7:39	87.18	Forced draft fan controls
Newman 2	6/11/2024 10:15	6/11/2024 14:33	4.30	Vacuum pump and air ejector controls
Newman 2	6/15/2024 8:11	6/15/2024 20:21	12.17	Other Other voltage system problems

Newman 2	6/24/2024 11:29	6/24/2024 16:48	5.32	Burner management system
Newman 2	7/3/2024 20:14	7/17/2024 21:42	337.47	Power Station switchyard (non generating unit equipment)
Newman 2	7/17/2024 22:32	7/18/2024 16:34	18.03	Inner casing C
Newman 2	7/18/2024 16:36	7/19/2024 4:49	12.22	Vacuum pump and air ejector controls
Newman 2	7/19/2024 5:08	7/19/2024 12:16	7.13	Vacuum pump and air ejector controls
Newman 2	7/19/2024 14:58	7/20/2024 12:57	21.98	Vacuum pump and air ejector controls
Newman 2	8/9/2024 17:56	8/9/2024 23:29	5.55	Other fuel quality problems
Newman 2	9/19/2024 16:21	9/28/2024 15:07	214.77	Burner management system
Newman 2	9/30/2024 3:49	9/30/2024 10:50	7.02	Turbine governing system
Newman 3 (2)	6/28/2023 2:00	4/19/2024 20:00	7122.00	Other miscellaneous balance of plant problems
Newman 3	4/19/2024 20:06	4/19/2024 21:47	1.68	Other miscellaneous balance of plant problems
Newman 3	4/19/2024 22:30	4/23/2024 14:31	88.02	Bearings C
Newman 3	4/23/2024 19:09	4/25/2024 14:13	43.07	Bearings C
Newman 3	5/17/2024 7:08	5/18/2024 13:07	29.98	Other feedwater system problems
Newman 3	7/4/2024 8:45	7/4/2024 9:43	0.97	Casing
Newman 3	7/4/2024 11:54	7/4/2024 12:38	0.73	Casing
Newman 3	7/8/2024 10:27	7/9/2024 5:18	18.85	Tube sheet fouling
Newman 3	7/13/2024 23:54	7/14/2024 1:27	1.55	Cooling tower fouling
Newman 3	7/15/2024 12:03	7/16/2024 9:46	21.72	Other feedwater system problems
Newman 3	8/9/2024 17:56	8/9/2024 19:47	1.85	Economic (for internal use at plants only)
Newman 3	8/28/2024 11:19	8/28/2024 20:45	9.43	Burner management system
Newman 3	9/17/2024 7:58	9/17/2024 18:51	10.88	Burner management system
Newman 4GT1	11/15/2023 7:51	11/15/2023 11:03	3.20	Instrument air piping
Newman 4GT1	6/1/2024 12:27	6/8/2024 18:26	173.98	Low pressure bearings A
Newman 4GT1	6/24/2024 8:34	6/24/2024 9:29	0.92	Control valves
Newman 4GT1	9/16/2024 2:00	9/16/2024 3:19	1.32	Low pressure bearings A
Newman 4GT2	10/28/2023 10:22	10/28/2023 11:13	0.85	High pressure bearings D
Newman 4GT2	5/17/2024 20:48	5/18/2024 3:41	6.88	Other miscellaneous auxiliary system problems
Newman 4GT2	5/18/2024 17:44	5/18/2024 18:19	0.58	Other feedwater system problems
Newman 4GT2	5/19/2024 22:45	5/20/2024 2:17	3.53	High pressure bearings D
Newman 4GT2	5/20/2024 20:35	5/20/2024 23:30	2.92	Feedwater pump
Newman 4GT2	5/24/2024 6:20	5/24/2024 11:29	5.15	Feedwater pump
Newman 4GT2	7/3/2024 4:58	7/3/2024 7:25	2.45	Gas fuel system B
Newman 4GT2	9/6/2024 4:27	9/6/2024 10:54	6.45	Low pressure bearings A
Newman 4GT2	9/16/2024 0:12	9/16/2024 3:57	3.75	Low pressure bearings A
Newman 4GT2	9/21/2024 9:47	9/21/2024 10:30	0.72	Low pressure bearings A
Newman 4GT2	9/29/2024 6:03	9/29/2024 8:35	2.53	Low pressure bearings A
Newman 4ST	10/3/2023 19:34	10/4/2023 1:46	6.20	Feedwater controls
Newman 4ST	11/15/2023 7:51	11/17/2023 11:00	51.15	Exciter drive
Newman 4ST	5/20/2024 18:34	5/21/2024 4:33	9.98	Loss of vacuum not attributable to a particular component such a
Newman 4ST	5/24/2024 6:13	5/24/2024 13:12	6.98	Feedwater pump
Newman 4ST	7/9/2024 14:55	7/10/2024 21:01	30.10	Lube oil system valves and piping
Newman 4ST	7/11/2024 14:33	7/11/2024 21:34	7.02	Hydraulic system pipes and valves
Newman 4ST	9/6/2024 7:38	9/6/2024 13:12	5.57	Feedwater pump
Newman 4ST	9/16/2024 0:17	9/16/2024 6:03	5.77	Low pressure bearings A
Newman 4ST	9/29/2024 6:29	9/29/2024 17:14	10.75	Low pressure bearings A
Newman 5GT3	10/30/2023 2:57	10/30/2023 7:34	4.62	Other Controls and instrumentation Problems A
Newman 5GT4	7/19/2024 9:13	7/19/2024 11:08	1.92	Feedwater pump suction screens
Newman 5ST	10/7/2023 9:05	10/7/2023 10:17	1.20	Other lube oil system problems
Newman 5ST	6/20/2024 6:38	6/20/2024 9:15	2.62	Miscellaneous plant auxiliary process and services instrumentation
Newman 6-GT5	4/5/2024 8:07	4/6/2024 17:07	33.00	480-volt circuit breakers
Newman 6-GT5	4/23/2024 7:24	4/23/2024 9:56	2.53	AC Protection devices
Newman 6-GT5	9/17/2024 19:05	9/18/2024 6:00	10.92	Instrument air compressors
Newman 6-GT5	1/16/2024 17:10	1/16/2024 19:10	2.00	Gas fuel system including controls and instrumentation
Newman 6-GT5	1/18/2024 7:30	1/18/2024 10:00	2.50	Gas fuel system including controls and instrumentation
Newman 6-GT5	3/25/2024 18:00	3/30/2024 16:52	118.87	Fire detection and extinguishing system (including hazardous gas detection system)
Rio Grande 6	4/2/2024 23:00	4/25/2024 12:51	541.85	Operator error
Rio Grande 6	4/26/2024 10:17	6/6/2024 17:51	991.57	Operator error
Rio Grande 6	6/14/2024 17:16	6/28/2024 8:58	327.70	Exciter commutator and brushes
Rio Grande 7	11/9/2023 14:30	11/15/2023 14:59	144.48	Turbine governing system
Rio Grande 7	3/14/2024 9:21	3/16/2024 21:37	60.27	Economizer
Rio Grande 7	3/20/2024 9:43	3/20/2024 11:02	1.32	Total unit performance testing (use appropriate codes for individual component testing)
Rio Grande 8	10/10/2023 15:48	10/15/2023 0:25	104.62	Turbine governing system
Rio Grande 8	11/9/2023 21:54	11/12/2023 17:24	67.50	Miscellaneous drain and vent valves
Rio Grande 8	12/21/2023 4:02	12/22/2023 12:58	32.93	Volt Circuit Breakers
Rio Grande 8	12/22/2023 14:52	12/22/2023 15:42	0.83	Feedwater regulating (boiler level control) valve
Rio Grande 8	12/22/2023 18:20	12/28/2023 8:18	133.97	Feedwater regulating (boiler level control) valve
Rio Grande 8	5/1/2024 10:43	5/1/2024 22:10	11.45	Automatic turbine control systems - digital control and monitory
Rio Grande 8	5/14/2024 13:45	5/14/2024 14:32	0.78	Feedwater controls (report local controls -- feedwater pump;
Rio Grande 8	5/27/2024 17:32	5/28/2024 20:36	27.07	Automatic turbine control systems - digital control and monitoring
Rio Grande 8	5/28/2024 22:58	6/5/2024 7:22	176.40	Automatic turbine control systems - digital control and monitoring
Rio Grande 8	6/10/2024 2:05	6/10/2024 4:03	1.97	Forced draft fan controls
Rio Grande 8	6/11/2024 8:00	6/11/2024 18:04	10.07	Forced draft fan controls
Rio Grande 8	6/11/2024 18:22	6/11/2024 18:40	0.30	Automatic turbine control systems - digital control and monitoring
Rio Grande 8	7/12/2024 16:17	7/12/2024 17:09	0.87	Burner management system
Rio Grande 8	8/8/2024 21:25	8/8/2024 22:04	0.65	Other turbine instrument and control problems
Rio Grande 8	8/21/2024 20:28	8/22/2024 8:07	11.65	Other turbine instrument and control problems
Rio Grande 8	8/26/2024 20:38	8/26/2024 21:11	0.55	Other turbine instrument and control problems
Rio Grande 8	8/28/2024 14:28	8/28/2024 15:02	0.57	Other turbine instrument and control problems
Rio Grande 8	8/28/2024 15:53	8/28/2024 16:34	0.68	Other turbine instrument and control problems
Rio Grande 8	8/29/2024 1:46	8/29/2024 11:40	9.90	Other turbine instrument and control problems
Rio Grande 8	9/22/2024 22:42	9/23/2024 7:42	9.00	Feedwater regulating (boiler level control) valve
Rio Grande 9	11/28/2023 6:22	11/28/2023 16:02	9.67	Fire protection system instrumentation and controls
Rio Grande 9	11/28/2023 20:34	11/29/2023 12:45	16.18	Fire protection system instrumentation and controls

Rio Grande 9	4/1/2024 0:01	4/1/2024 15:58	15.95	Fire protection system instrumentation and controls
Rio Grande 9	4/1/2024 18:21	4/2/2024 11:13	16.87	Transmission system problems other than catastrophes (do not inc
Rio Grande 9	4/15/2024 8:25	4/15/2024 10:28	2.05	Fuel Gas Compressor Controls and Instrumentation
Rio Grande 9	4/20/2024 16:31	4/22/2024 17:35	49.07	Hydraulic oil system B
Rio Grande 9	4/30/2024 0:01	5/10/2024 14:30	254.48	Other low pressure problems B
Rio Grande 9	9/14/2024 15:46	9/14/2024 18:00	2.23	Closed cooling water pumps

EPE Notes: (1) Reason for outage is defined by NERC Generating Availability Data System (GADS)
(2) Outage began outside of test year period, for more details, refer to Schedule H-6.2b and the direct testimony of David Rodriguez

EL PASO ELECTRIC COMPANY
2024 TEXAS FUEL RECONCILIATION FILING
SCHEDULE H-6.2b: FOSSIL UNIT PLANNED OUTAGE DATA
SPONSOR: JEFFERY M. HUGHES
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

UNIT NAME	SCHEDULED START DATE	SCHEDULED END DATE	SCHEDULED LENGTH OF OUTAGE (Days)	ACTUAL START DATE	ACTUAL END DATE	ACTUAL LENGTH OF OUTAGE (Days)	REASON FOR OUTAGE
Copper	10/29/2023	11/12/2023	14	10/25/23 9:45	11/17/23 2:00	22.68	General unit inspection A
Copper				2/17/24 4:30	2/17/24 6:45	0.09	Starting system (including motor)
Copper				2/23/24 9:50	2/23/24 15:21	0.23	Starting system (including motor)
Montana 1				11/3/23 6:30	11/3/23 12:30	0.25	Boroscope inspection B
Montana 1				12/3/23 11:00	12/4/23 5:51	0.79	High pressure nozzles/vanes A
Montana 1				12/4/23 7:00	12/4/23 17:29	0.44	Intercoolers A
Montana 1				3/16/24 9:00	3/16/24 14:10	0.22	General unit inspection
Montana 1	3/18/2024	4/6/2024	19	3/18/24 6:04	3/31/24 23:59	13.75	General unit inspection

EL PASO ELECTRIC COMPANY
2024 TEXAS FUEL RECONCILIATION FILING
SCHEDULE H-6.2b: FOSSIL UNIT PLANNED OUTAGE DATA
SPONSOR: JEFFERY M. HUGHES
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

UNIT NAME	SCHEDULED START DATE	SCHEDULED END DATE	SCHEDULED LENGTH OF OUTAGE (Days)	ACTUAL START DATE	ACTUAL END DATE	ACTUAL LENGTH OF OUTAGE (Days)	REASON FOR OUTAGE
Montana 2				11/2/23 6:00	11/2/23 10:00	0.17	Boroscope inspection B
Montana 2				12/9/23 7:00	12/31/23 23:59	22.71	Other miscellaneous jet engine problems
Montana 2				1/1/24 0:00	1/10/24 15:47	9.66	Other miscellaneous jet engine problems
Montana 2				3/16/24 9:00	3/16/24 14:10	0.22	General unit inspection
Montana 2	3/25/2024	4/11/2024	17	3/25/24 7:00	3/31/24 23:59	6.71	General unit inspection
Montana 3				1/25/24 13:30	1/25/24 15:04	0.07	Boroscope inspection
Montana 3				2/6/24 5:00	2/6/24 17:42	0.53	Boroscope inspection
Montana 3				3/16/24 9:00	3/16/24 14:10	0.22	General unit inspection

EL PASO ELECTRIC COMPANY
2024 TEXAS FUEL RECONCILIATION FILING
SCHEDULE H-6.2b: FOSSIL UNIT PLANNED OUTAGE DATA
SPONSOR: JEFFERY M. HUGHES
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

UNIT NAME	SCHEDULED START DATE	SCHEDULED END DATE	SCHEDULED LENGTH OF OUTAGE (Days)	ACTUAL START DATE	ACTUAL END DATE	ACTUAL LENGTH OF OUTAGE (Days)	REASON FOR OUTAGE
Montana 4				10/14/23 7:00	10/15/23 15:47	1.37	Fuel nozzles/vanes B
Montana 4				1/24/24 20:00	1/29/24 8:44	4.53	Generator vibration (excluding vibration due to failed bearing and other components)
Montana 4				3/16/24 9:00	3/16/24 14:10	0.22	General unit inspection
Newman 1	10/15/2023	11/4/2023	20	10/13/23 21:07	11/10/23 22:21	28.05	Boiler Inspections
Newman 2				9/29/23 20:00	11/15/23 0:26	46.18	Casing
Newman 2				10/1/23 0:00	10/2/23 10:00	1.42	Casing
Newman 2				10/11/23 8:30	10/31/23 23:59	20.65	equipment)
Newman 2				11/1/23 0:00	11/15/23 0:26	14.02	Power Station switchyard (non generating unit equipment)
Newman 2	1/7/2024	3/30/2024	83	1/5/24 8:00	3/31/24 23:59	86.67	Distributive Control System (DCS)
Newman 3 (2)	11/12/2023	5/4/2024	174				Summer Prep-Major Inspection
Newman 4GT1				10/1/23 0:00	10/3/23 22:01	2.92	LP Evaporator tubes
Newman 4GT2	1/27/2024	2/14/2024	19	1/5/24 0:00	6/1/24 12:19	148.51	Major overhaul (non-specific overhaul)
Newman 4GT2	1/7/2024	4/4/2024	88	1/5/24 23:10	3/31/24 23:59	86.03	Major overhaul (use for non
Newman 4GT2	1/7/2024	4/4/2024	88	1/5/24 23:33	3/31/24 23:59	86.02	Major overhaul (use for non
Newman 4ST	1/7/2024	4/4/2024	88	1/5/24 22:31	3/31/24 23:59	86.06	Major turbine overhaul

EL PASO ELECTRIC COMPANY
2024 TEXAS FUEL RECONCILIATION FILING
SCHEDULE H-6.2b: FOSSIL UNIT PLANNED OUTAGE DATA
SPONSOR: JEFFERY M. HUGHES
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

UNIT NAME	SCHEDULED START DATE	SCHEDULED END DATE	SCHEDULED LENGTH OF OUTAGE (Days)	ACTUAL START DATE	ACTUAL END DATE	ACTUAL LENGTH OF OUTAGE (Days)	REASON FOR OUTAGE
Newman 6-GT5				1/19/24 15:00	1/31/24 23:59	12.37	SCR NOx Other ammonia system problems
Newman 6-GT5				2/1/24 0:00	2/8/24 5:01	7.21	SCR NOx Other ammonia system problems
Newman 6-GT5				2/8/24 5:17	2/8/24 8:58	0.15	Gas fuel system including controls and instrumentation
Newman 6-GT5				2/8/24 19:56	2/9/24 7:51	0.50	Nox stack emissions- gas turbines
Newman 6-GT5				2/9/24 20:00	2/10/24 7:43	0.49	Nox stack emissions- gas turbines
Newman 6-GT5				2/10/24 23:00	2/11/24 5:40	0.28	Nox stack emissions- gas turbines
Newman 6-GT5				2/11/24 22:01	2/12/24 16:04	0.75	SCR NOx Other ammonia system problems
Newman 6-GT5				2/29/24 6:00	2/29/24 14:00	0.33	SCR NOx Other ammonia system problems
Rio Grande 6	12/3/2023	12/30/2023	27	11/26/23 0:00	12/31/23 23:59	36.00	Main steam piping up to turbine stop valves
Rio Grande 7	12/3/2023	12/30/2023	27	11/16/23 8:55	12/31/23 23:59	45.63	Main steam piping up to turbine stop valves
Rio Grande 7				1/1/24 0:00	1/3/24 15:30	2.65	Main steam piping up to turbine stop valves
Rio Grande 7				1/1/24 0:00	1/3/24 15:30	2.65	Main steam piping up to turbine stop valves
Rio Grande 8				1/7/24 22:00	1/21/24 10:00	13.50	Main transformer
Rio Grande 8 (3)	3/17/2024	4/27/2024	41	3/19/24 21:03	5/1/24 9:46	42.53	Balance of plant overhaul/outage
Rio Grande 9	2/25/2024	3/24/2024	28	2/24/24 7:00	3/31/24 23:59	36.71	Summer Prep

Note: Schedule reflects a combination of planned and maintenance outages.

1. Planned outage was scheduled November 13, 2021 to May 30, 2022 actual outage start date was November 12, 2021.
2. For start and end dates of planned outage please refer to Jeff Hughes direct testimony.
3. Outage end date is beyond the end of the Test Year for this filing.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE H-6.2b: FOSSIL UNIT PLANNED OUTAGE DATA
SPONSOR: DAVID RODRIGUEZ
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

UNIT NAME	SCHEDULED START DATE	SCHEDULED END DATE	SCHEDULED LENGTH OF OUTAGE (Days)	ACTUAL START DATE	ACTUAL END DATE	ACTUAL LENGTH OF OUTAGE (Days)	REASON FOR OUTAGE
Copper	10/29/2023	11/12/2023	14	10/25/23 9:45	11/17/23 2:00	22.68	General unit inspection A
Copper				2/17/24 4:30	2/17/24 6:45	0.09	Starting system (including motor)
Copper				2/23/24 9:50	2/23/24 15:21	0.23	Starting system (including motor)
Copper				4/10/24 22:00	4/13/24 17:52	2.83	Generator voltage control
Montana 1				11/3/23 6:30	11/3/23 12:30	0.25	Boroscope inspection B
Montana 1				12/3/23 11:00	12/4/23 5:51	0.79	High pressure nozzles/vanes A
Montana 1				12/4/23 7:00	12/4/23 17:29	0.44	Intercoolers A
Montana 1				3/16/24 9:00	3/16/24 14:10	0.22	General unit inspection
Montana 1	3/18/2024	4/6/2024	19	3/18/24 6:04	4/6/24 10:30	13.75	General unit inspection
Montana 1				4/13/24 5:30	4/13/24 6:30	0.04	General unit inspection A
Montana 1				8/10/24 7:00	8/11/24 16:27	1.39	Other miscellaneous balance of plant problems
Montana 1				8/11/24 16:58	8/11/24 17:36	0.03	Other miscellaneous balance of plant problems
Montana 1				8/27/24 7:00	8/27/24 12:00	0.21	Other miscellaneous balance of plant problems
Montana 2				11/2/23 6:00	11/2/23 10:00	0.17	Boroscope inspection B
Montana 2				12/9/23 7:00	12/31/23 23:59	22.71	Other miscellaneous jet engine problems
Montana 2				1/1/24 0:00	1/10/24 15:47	9.66	Other miscellaneous jet engine problems
Montana 2				3/16/24 9:00	3/16/24 14:10	0.22	General unit inspection
Montana 2	3/25/2024	4/11/2024	17	3/25/24 7:00	4/11/2024 23:59	17.71	General unit inspection
Montana 2				4/13/24 5:30	4/13/24 6:30	0.04	General unit inspection A
Montana 2				5/11/24 6:00	5/16/24 9:30	5.15	High pressure blades/buckets B
Montana 2				5/20/24 7:00	5/20/24 12:32	0.23	Water Injection System (Gas Turbine)
Montana 2				6/2/24 1:00	6/2/24 10:35	0.40	Boroscope inspection A
Montana 2				6/14/24 7:03	6/14/24 12:00	0.21	Hydraulic oil system A
Montana 3				1/25/24 13:30	1/25/24 15:04	0.07	Boroscope inspection
Montana 3				2/6/24 5:00	2/6/24 17:42	0.53	Boroscope inspection
Montana 3				3/16/24 9:00	3/16/24 14:10	0.22	General unit inspection
Montana 3				4/13/24 5:30	4/13/24 6:30	0.04	Other miscellaneous external problems
Montana 3	4/15/2024	5/3/2024	18	4/15/24 7:00	5/6/24 12:47	21.24	General unit inspection A
Montana 3				6/4/24 8:00	6/4/24 11:30	0.15	Boroscope inspection A
Montana 3				6/29/24 7:00	6/29/24 11:00	0.17	Boroscope inspection A
Montana 3				8/10/24 7:00	8/10/24 10:30	0.15	Boroscope inspection A
Montana 4				10/14/23 7:00	10/15/23 15:47	1.37	Fuel nozzles/vanes B
Montana 4				1/24/24 20:00	1/29/24 8:44	4.53	Generator vibration (excluding vibration due to failed bearing and other components)
Montana 4				3/16/24 9:00	3/16/24 14:10	0.22	General unit inspection
Montana 4				4/1/24 8:00	4/1/24 11:30	0.15	Other fuel system problems A
Montana 4				4/13/24 5:30	4/13/24 6:30	0.04	General unit inspection A
Montana 4	4/22/2024	5/10/2024	18	4/24/24 0:00	5/13/24 15:18	19.64	General unit inspection A
Montana 4				5/14/24 13:40	5/14/24 18:45	0.21	Water Injection System (Gas Turbine)
Montana 4				5/14/24 18:58	5/16/24 15:29	1.85	Compressor casing and bolts
Montana 4				5/24/24 8:00	5/24/24 10:30	0.10	Hydraulic oil system A
Montana 4				7/18/24 5:00	7/18/24 14:37	0.40	Generator vibration (excluding vibration due to failed bearing a
Montana 4				7/19/24 4:00	7/19/24 16:01	0.50	Generator doble testing
Newman 1	10/15/2023	11/4/2023	20	10/13/23 21:07	11/10/23 22:21	28.05	Boiler Inspections
Newman 1				9/16/24 7:30	9/30/24 23:59	14.69	Circulating water pump motors
Newman 2				9/29/23 20:00	11/15/23 0:26	46.18	Casing
Newman 2				10/1/23 0:00	10/2/23 10:00	1.42	Casing
Newman 2				10/11/23 8:30	10/31/23 23:59	20.65	Power Station switchyard (non generating unit equipment)
Newman 2				11/1/23 0:00	11/15/23 0:26	14.02	Power Station switchyard (non generating unit equipment)

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE H-6.2b: FOSSIL UNIT PLANNED OUTAGE DATA
SPONSOR: DAVID RODRIGUEZ
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

UNIT NAME	SCHEDULED START DATE	SCHEDULED END DATE	SCHEDULED LENGTH OF OUTAGE (Days)	ACTUAL START DATE	ACTUAL END DATE	ACTUAL LENGTH OF OUTAGE (Days)	REASON FOR OUTAGE
Newman 2	1/7/2024	3/30/2024	83	1/5/24 8:00	5/24/24 16:11	140.34	Distributive Control System (DCS)
Newman 2				5/24/24 16:23	5/25/24 8:28	0.67	Other miscellaneous auxiliary system problems
Newman 2				5/25/24 8:56	5/25/24 21:09	0.51	Inner casing C
Newman 2				8/13/24 21:07	8/16/24 0:32	2.14	Condenser tube leaks
Newman 3				6/21/24 21:00	6/30/24 23:59	9.12	Refractory and insulation
Newman 3				7/3/24 13:46	7/4/24 7:59	0.76	Casing
Newman 3 (1)	11/12/2023	5/4/2024	174				Summer Prep-Major Inspection
Newman 4GT1				10/1/23 0:00	10/3/23 22:01	2.92	LP Evaporator tubes
Newman 4GT1	1/7/2024	4/4/2024	88	1/5/24 23:10	6/1/24 12:19	86.03	Major overhaul (use for non
Newman 4GT1				7/19/24 22:07	7/24/24 12:36	4.60	Feedwater pump
Newman 4GT2	1/7/2024	4/4/2024	88	1/5/24 23:33	5/16/2024 17:08	86.02	Major overhaul (use for non
Newman 4GT2				6/19/24 22:07	6/22/24 10:00	2.50	HP economizer
Newman 4ST	1/7/2024	4/4/2024	88	1/5/24 22:31	5/19/24 3:46	86.06	Major turbine overhaul
Newman 4ST				7/16/24 21:01	7/18/24 6:55	1.41	Lube oil system valves and piping
Newman 4ST				7/19/24 22:06	7/24/24 14:53	4.70	Circulating water pumps
Newman 5GT3	3/17/2024	4/21/2024	35	4/13/24 8:58	6/10/24 17:51	58.37	General unit inspection A
Newman 5GT3				7/12/24 4:22	7/12/24 6:25	0.09	Gas fuel system B
Newman 5GT4				7/17/24 23:00	7/19/24 0:01	1.04	LP superheater
Newman 5ST	3/17/2024	4/21/2024	35	4/13/24 8:57	6/11/24 18:24	59.39	Inspection F
Newman 6				5/18/24 20:55	5/19/24 15:47	0.79	Other economic problems
Newman 6				6/23/24 21:00	6/25/24 14:18	1.72	Other miscellaneous auxiliary system problems
Newman 6				7/26/24 21:48	7/28/24 18:30	1.86	Inlet air evaporative coolers B
Newman 6-GT5				1/19/24 15:00	1/31/24 23:59	12.37	SCR NOx Other ammonia system problems
Newman 6-GT5				2/1/24 0:00	2/8/24 5:01	7.21	SCR NOx Other ammonia system problems
Newman 6-GT5				2/8/24 5:17	2/8/24 8:58	0.15	Gas fuel system including controls and instrumentation
Newman 6-GT5				2/8/24 19:56	2/9/24 7:51	0.50	Nox stack emissions- gas turbines
Newman 6-GT5				2/9/24 20:00	2/10/24 7:43	0.49	Nox stack emissions- gas turbines
Newman 6-GT5				2/10/24 23:00	2/11/24 5:40	0.28	Nox stack emissions- gas turbines
Newman 6-GT5				2/11/24 22:01	2/12/24 16:04	0.75	SCR NOx Other ammonia system problems
Newman 6-GT5				2/29/24 6:00	2/29/24 14:00	0.33	SCR NOx Other ammonia system problems
Rio Grande 6	12/3/2023	12/30/2023	27	11/26/23 0:00	12/31/23 23:59	36.00	Main steam piping up to turbine stop valves
Rio Grande 7	12/3/2023	12/30/2023	27	11/16/23 8:55	12/31/23 23:59	45.63	Main steam piping up to turbine stop valves
Rio Grande 7				1/1/24 0:00	1/3/24 15:30	2.65	Main steam piping up to turbine stop valves
Rio Grande 7				1/1/24 0:00	1/3/24 15:30	2.65	Main steam piping up to turbine stop valves
Rio Grande 7				5/15/24 22:09	5/22/24 0:34	6.10	Refractory and insulation
Rio Grande 7				7/14/24 18:16	7/17/24 12:19	2.75	Economizer
Rio Grande 8				1/7/24 22:00	1/21/24 10:00	13.50	Main transformer
Rio Grande 8				9/20/24 21:06	9/22/24 20:03	1.96	Condenser tube leaks
Rio Grande 8	3/17/2024	4/27/2024	41	3/19/24 21:03	5/1/24 9:46	42.53	Balance of plant overhaul/outage
Rio Grande 9	2/25/2024	3/24/2024	28	2/24/24 7:00	3/31/24 23:59	36.71	Summer Prep
Rio Grande 9				9/16/24 5:00	9/25/24 14:22	9.39	Engine exchange
Rio Grande 9				9/25/24 15:05	9/27/24 7:20	1.68	Engine exchange

Note: Schedule reflects a combination of planned and maintenance outages.
1. For details regarding the dates of planned outage, please refer to David Rodriguez direct testimony.

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE H-6.2c: FOSSIL UNIT OUTAGE PLANNING
SPONSOR: DAVID RODRIGUEZ
PREPARER: KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

PUBLIC

SCHEDULE H-6.2c is a CONFIDENTIAL and/or HIGHLY SENSITIVE PROTECTED MATERIALS attachment.

EL PASO ELECTRIC COMPANY
2025 RATE CASE FILING
SCHEDULE H-6.3a: NUCLEAR UNIT INCREMENTAL OUTAGE COSTS
SPONSOR: VICTOR MARTINEZ/CARY HARBOR
PREPARER: KARA RANDLE/DANA PEREZ
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

PLANT NAME	PALO VERDE GENERATING STATION (PVGS)		
UNIT DESIGNATION	PVGS No. 1	OUTAGE NUMBER	U1R24
ACTUAL START DATE	10/10/23	ACTUAL END DATE	11/11/23
OUTAGE DURATION (Days)	35		

FERC ACCOUNT NUMBER	DESCRIPTION	ACTUAL COMPANY EXPENSES
OPERATIONS		
520000	Nuclear Pwr-Steam Expenses	$ 365,183.99
Total Operations		$ 365,183.99
MAINTENANCE		
528000	Nuc Pwr-Maint Supv and Engnrg	$ 663,344.73
529000	Maintenance of Structures	157,816.08
530000	Maintenance of Reactor Plant Equipment	1,647,920.38
531000	Maintenance of Electric Plant	1,185,175.80
532000	Maintenance of Miscellaneous Nuclear Plant	237,390.68
Total Maintenance		$ 3,891,647.67
Other		
930200	Miscellaneous General	$ 301,748.82
Total Other		$ 301,748.82
	TOTAL EXPENSES	$ 4,558,580.48

NOTE: This schedule represents planned and unplanned outages which are greater than $500,000 in total.

EL PASO ELECTRIC COMPANY
2025 RATE CASE FILING
SCHEDULE H-6.3a: NUCLEAR UNIT INCREMENTAL OUTAGE COSTS
SPONSOR: VICTOR MARTINEZ/CARY HARBOR
PREPARER: KARA RANDLE/DANA PEREZ
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

PLANT NAME	PALO VERDE GENERATING STATION (PVGS)		
UNIT DESIGNATION	PVGS No. 3	OUTAGE NUMBER	U3R24
ACTUAL START DATE	04/06/24	ACTUAL END DATE	05/12/24
OUTAGE DURATION (Days)	36		

FERC ACCOUNT NUMBER	DESCRIPTION	ACTUAL COMPANY EXPENSES
OPERATIONS		
520000	Nuclear Pwr-Steam Expenses	$ 395,700.00
Total Operations		$ 395,700.00
MAINTENANCE		
528000	Nuc Pwr-Maint Supv and Engnrg	$ 2,528,741.00
529000	Maintenance of Structures	204,228.00
530000	Maintenance of Reactor Plant Equipment	1,480,548.00
531000	Maintenance of Electric Plant	1,555,655.00
532000	Maintenance of Miscellaneous Nuclear Plant	457,536.00
Total Maintenance		$ 6,226,708
Other		
930200	Miscellaneous General	$ 399,435.00
Total Other		$ 399,435.00

TOTAL EXPENSES $ 7,021,843.00

NOTE: This schedule represents planned and unplanned outages which are greater than $500,000 in total.

EL PASO ELECTRIC COMPANY
2021 TEXAS RATE CASE FILING
SCHEDULE H-6.3b: FOSSIL UNIT INCREMENTAL OUTAGE COSTS
SPONSOR: J KYLE OLSON
PREPARER: PEDRO VEGA
FOR THE TEST YEAR ENDED DECEMBER 31, 2020

PLANT NAME	NEWMAN POWER PLANT		
UNIT DESIGNATION	UNIT 4 GT2	OUTAGE NUMBER	
ACTUAL START DATE	03/01/20	ACTUAL END DATE	05/01/20
OUTAGE DURATION (Days)	61		

FERC ACCOUNT NUMBER	DESCRIPTION	ACTUAL EXPENSES
OPERATIONS		
505000	Electric Expenses	$6,660
925000	Injuries And Damages	$127
926000	Employee Pensions & Ben	$15,492
Total Operations		$22,279
MAINTENANCE		
512000	Maint of Boiler Plant	$175,545
513000	Maint of Elect Plant	$2,244,512
Total Maintenance		$2,420,057
TRANSMISSION		
Total Transmission		$0

NOTE: This schedule represents planned and unplanned outages greater than $500,000 in total.

TOTAL EXPENSES $2,442,336

EL PASO ELECTRIC COMPANY
2021 TEXAS RATE CASE FILING
SCHEDULE H-6.3b: FOSSIL UNIT INCREMENTAL OUTAGE COSTS
SPONSOR: J KYLE OLSON
PREPARER: PEDRO VEGA
FOR THE TEST YEAR ENDED DECEMBER 31, 2020

PLANT NAME	NEWMAN POWER PLANT		
UNIT DESIGNATION	UNIT 3	OUTAGE NUMBER	
ACTUAL START DATE	01/03/20	ACTUAL END DATE	02/16/20
OUTAGE DURATION (Days)	44		

FERC ACCOUNT NUMBER	DESCRIPTION	ACTUAL EXPENSES
OPERATIONS		
925000	Injuries And Damages	$68
926000	Employee Pensions & Ben	$6,732
Total Operations		$6,800
MAINTENANCE		
512000	Maint Of Boiler Plant	$816,665
513000	Maint Of Electric Plant	$656,702
514000	Maint Of Misc Steam Plant	$388
Total Maintenance		$1,473,755
TRANSMISSION		
Total Transmission		$0

NOTE: This schedule represents planned and unplanned outages greater than $500,000 in total.

TOTAL EXPENSES $1,480,555

EL PASO ELECTRIC COMPANY
2021 TEXAS RATE CASE FILING
SCHEDULE H-6.3b: FOSSIL UNIT INCREMENTAL OUTAGE COSTS
SPONSOR: J KYLE OLSON
PREPARER: PEDRO VEGA
FOR THE TEST YEAR ENDED DECEMBER 31, 2020

PLANT NAME	MONTANA POWER STATION		
UNIT DESIGNATION	UNIT 3	OUTAGE NUMBER	
ACTUAL START DATE	09/28/20	ACTUAL END DATE	01/01/21
OUTAGE DURATION (Days)	95		

FERC ACCOUNT NUMBER	DESCRIPTION	ACTUAL EXPENSES
OPERATIONS		
925000	Injuries And Damages	$99
926000	Employee Pensions & Ben	$8,055
Total Operations		$8,154
MAINTENANCE		
553000	Maint Of Gen & Elec Plant	$1,314,834
Total Maintenance		$1,314,834
TRANSMISSION		
Total Transmission		$0

NOTE: This schedule represents planned and unplanned outages greater than $500,000 in total.

TOTAL EXPENSES $1,322,988

EL PASO ELECTRIC COMPANY
2021 TEXAS RATE CASE FILING
SCHEDULE H-6.3b: FOSSIL UNIT INCREMENTAL OUTAGE COSTS
SPONSOR: J KYLE OLSON
PREPARER: PEDRO VEGA
FOR THE TEST YEAR ENDED DECEMBER 31, 2020

PLANT NAME	NEWMAN POWER PLANT		
UNIT DESIGNATION	UNIT 4 GT1	OUTAGE NUMBER	
ACTUAL START DATE	02/03/20	ACTUAL END DATE	03/07/20
OUTAGE DURATION (Days)	32		

FERC ACCOUNT NUMBER	DESCRIPTION	ACTUAL EXPENSES
OPERATIONS		
Total Operations		$0
MAINTENANCE		
513000	Maint of Elect Plant	$982,058
Total Maintenance		$982,058
TRANSMISSION		
Total Transmission		$0

NOTE: This schedule represents planned and unplanned outages greater than $500,000 in total.

TOTAL EXPENSES $982,058

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE H-6.3b: FOSSIL UNIT INCREMENTAL OUTAGE COSTS
SPONSOR: DAVID RODRIGUEZ
PREPARER: MARIA LOPEZ
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

PLANT NAME	NEWMAN POWER PLANT		
UNIT DESIGNATION	UNIT 2	OUTAGE NUMBER	GN720
ACTUAL START DATE	01/05/24	ACTUAL END DATE	03/31/24
OUTAGE DURATION (Days)	86		

FERC ACCOUNT NUMBER	DESCRIPTION	ACTUAL EXPENSES
OPERATIONS		
507000	UNIT 2 VALVE INSPECTION (RENTS)	$ 10,747
Total Operations		$10,747
MAINTENANCE		
513000	UNIT 2 VALVE INSPECTION - MAINT OF ELECTRIC PLANT	$ 907,300
Total Maintenance		$907,300
TRANSMISSION		
Total Transmission		$0

TOTAL EXPENSES	$918,048

The updated Succession and Talent Planning Process (STeP) was implemented in 2022 with updates from the previous Talent Review Process ("TRP") that was adopted and implemented in February 2013. STeP is an annual process for El Paso Electric Company ("EPE"). As workforce plans are identified to address business strategy or replacement needs through the STeP process, the appropriate recruitment, selection and training processes are executed to address future staffing opportunities identified over the next 1-5 years throughout the Company, not just the production unit sector. This is an annual process allowing the Company to maintain a current and accurate pulse check on the need of the organization.

The strength of EPE depends on our ability to maintain the highest levels of service and reliability to our customers. In order to meet these challenging goals, we must identify and develop people who will lead our company and contribute to those goals. This critically important task requires thoughtful evaluation and assessment of the strengths and development needs of our current leaders and potential future leaders. Strengthening our organizational capabilities and talent is a fundamental building block of our human resource development efforts and is essential to meeting our strategic goals.

The STeP is a key management tool designed to systematically assess and develop the management and leadership capability of our organization. The STeP process is a critical element of EPE workforce planning, organizational development, and the performance management system that focuses on the review and development of individual results, behavior, and potential.

OVERVIEW OF STeP PROCESS

Annually the executive team (ELT) and senior leadership team (SLT) members evaluate business strategies, business structure, future structure, current talent, future talent, and workforce planning needs to analyze the workforce of EPE. Each division's analysis is presented to executive leadership for review, consideration, and action planning. This includes review of top talent, work experience opportunities, synergies, and any potential workforce, talent gaps, or structure changes. Follow-up activities are monitored assuring execution and fulfillment of workforce needs.

OBJECTIVES OF THE STeP PROCESS

The STeP pursues the following objectives and outcomes:

- Alignment of decisions regarding management development and succession planning to EPE strategy;
- Discussion and evaluation of individual employee development plans;
- Early identification of top diverse talent in the organization;
- Identification of organizational issues that impede management development and potential outcomes;
- Development of the right people for the right positions at the right times; and
- Identification and development of action plans enabling our overall leadership development strategy.

2024 ELT Succession Plan

Division	ELT Position	Readiness	Last Name	First Name
Power Supply	VP Energy Supply	Now	CONFIDENTIAL	
Power Supply	VP Energy Supply	Now		
Power Supply	VP Energy Supply	Now		
Power Supply	VP Energy Supply	0-2 yrs		
Power Supply	VP Energy Supply	0-2 yrs		

FUEL TYPE: NATURAL GAS				
YEAR	NEWMAN PLANT EMPLOYEES	RIO GRANDE PLANT EMPLOYEES	MONTANA PLANT EMPLOYEES*	TOTAL
Test Year	68	38	21	127
2023	65	36	20	121
2022	64	38	24	126
2021	65	43	19	127
2020	67	47	19	133
2019	66	47	19	132

EPE has a 15.8% interest in the Palo Verde Generating Station (PVGS).
EPE does not employ any personnel in the production function of these plants. For information purposes, PVGS data is included on pages 2-3 of this schedule.
While EPE owns and operates the Copper Power Station (a 65 MW combustion turbine used for peaking purposes), this combustion turbine is operated remotely by personnel assigned to other production units.

Historical Palo Verde Staffing Summary
(all values: Dec Year End)

	2019	2020	2021	2022	2023
DIV/DEPT					
Work Management	35	0	0	31	34
Water Reclamation Facility	111	114	111	108	112
Training	83	78	72	72	82
Nuc Operations Adm	3	3	0	0	0
Outage	59	40	36	66	80
Operations	312	314	293	269	278
Maintenance	398	395	360	294	317
Radiation Protection	91	84	77	72	74
Chemistry	38	32	36	32	36
O&M Mods	0	0	0	6	7
Plt Mgr Adm	7	7	7	0	0
Industrial Safety	10	8	6	6	9
Production PI	23	0	0	0	0
NUCLEAR PRODUCTION	1170	1075	998	956	1029
Nuclear Plant Engr	100	92	90	137	150
Nuclear Design Engr	120	80	76	78	82
Nuclear Engr	1	1	1	0	1
Nuclear Fuel Mgmt	49	47	46	44	44
Engr Performance Improvement	22	48	54	0	0
Engineering Projects	19	16	14	20	19
NUCLEAR ENGINEERING	311	284	281	279	296

EL PASO ELECTRIC COMPANY
2025 TEXAS RATE CASE FILING
SCHEDULE H-7.3: PERSONNEL ASSIGNED FOR PLANT/UNIT
SPONSOR: DAVID RODRIGUEZ/VICTOR MARTINEZ
PREPARER: KARA RANDLE/MOLLY LOPEZ
FOR THE TEST YEAR ENDED SEPTEMBER 30, 2024

Historical Palo Verde Staffing Summary
(all values: Dec Year End)

	2019	2020	2021	2022	2023
STARS/Management Assistance	6	7	9	9	5
Regulatory Affairs	17	17	17	11	15
Site Programs/Organizational Effectiveness	30	34	26	43	37
Leadership Development	4	0	0	0	0
Nuclear Assurance	15	14	16	0	0
Employee Concerns/Safety Culture	5	5	4	3	4
Reg Affairs / Plt Improve Adm	2	0	0	2	1
REG AFFAIRS / PLT IMPROVE	79	77	72	68	62
Procurement/Stores/Supply Chain	35	54	54	52	72
Support Services	31	37	32	28	0
Nuclear Security	274	311	294	284	295
Emerg Svcs: Security/E Plan/Fire Prot Prog	46	0	0	0	0
Emerg Svcs / Support Adm	2	2	1	2	1
EMERG SVCS & SUPPORT	388	404	381	366	368
Executive Admin	5	6	6	5	7
Facility Management	18	16	15	20	0
Communications/Nuclear Policy	9	10	0	0	7
Nuclear Policy & Law	5	5	0	0	0
Total Strategy/Business Planning	0	0	13	6	0
Strategic Business Services	0	0	0	0	96
Strategic Plan/LRP/Owner Affrs/Bus OPS	13	11	8	8	0
Human Resources	10	13	14	16	20
STATION SUPPORT ORG's	60	61	56	55	130
TOTAL PVGS (Utility) STAFFING	2008	1901	1788	1724	1885
Contractors - On Line	328	371	381	370	301
Contractors - Outage	0	0	0	0	0
Matrixed (Corporate)	0	0	0	0	0
Total Palo Verde	2336	2272	2169	2094	2186

		FUEL TYPE: NATURAL GAS			
TEST YEAR	MONTH	NEWMAN PLANT EMPLOYEES	RIO GRANDE PLANT EMPLOYEES	MONTANA PLANT EMPLOYEES	TOTAL
2023	October	67	35	20	122
	November	67	35	20	122
	December	67	35	20	122
2024	January	65	36	20	121
	February	65	36	20	121
	March	65	35	20	120
	April	65	35	20	120
	May	65	35	20	120
	June	65	36	21	122
	July	65	36	21	122
	August	68	35	21	124
	September	67	38	21	126
	Average	66	36	20	122

		FUEL TYPE: NATURAL GAS			
RATE YEAR	MONTH	NEWMAN PLANT EMPLOYEES	RIO GRANDE PLANT EMPLOYEES	MONTANA PLANT EMPLOYEES	TOTAL
2025	July	66	37	20	123
	August	66	37	20	123
	September	66	37	20	123
	October	66	37	20	123
	November	66	37	20	123
	December	66	37	20	123
2026	January	66	37	20	123
	February	66	37	20	123
	March	66	37	20	123
	April	66	37	20	123
	May	66	37	20	123
	June	66	37	20	123
	Average	66	37	20	123

Note: All personnel assigned are full-time.
While EPE owns and operates the Copper Power Station (a 65 MW combustion turbine used for peaking purposes), this combustion turbine is operated remotely by personnel assigned to other production units.

Palo Verde Staffing Summary (October 2023 through September 2024)

DIV/DEPT	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
Tot Outage	79	80	81	80	83	96	105	105	105	104	105	104
Tot Operations	274	274	277	278	274	273	272	272	266	273	267	268
Tot Site Maintenance	314	315	319	317	326	316	317	320	321	318	319	318
Tot Chemistry	36	37	37	36	35	38	39	38	37	36	37	37
Tot Site Rad Protection	76	75	75	74	78	79	78	77	79	78	77	78
Tot O&M Mods	7	7	7	7	7	7	8	7	7	7	7	6
Tot Work Management	32	32	34	34	35	36	34	34	35	33	34	34
Tot Water Resource Mgmt	111	111	112	112	111	113	111	120	121	120	121	120
Tot Nuclear Training	81	81	81	82	82	82	80	80	78	79	80	81
Industrial Health & Safety	9	9	9	9	9	9	9	9	9	9	9	9
Nuc Operations Adm	0	0	0	0	0	0	1	2	3	3	3	3
Management Assistance	5	5	5	5	5	5	4	4	4	4	4	4
NUCLEAR OPERATION	**1024**	**1026**	**1037**	**1034**	**1045**	**1054**	**1058**	**1068**	**1065**	**1064**	**1063**	**1062**
Tot Whse/Supply Chain	68	68	72	72	73	73	71	71	70	70	70	70
Total Emergency Services	276	291	291	295	291	292	291	288	283	281	281	293
Tot Palo Verde Communications	7	7	7	7	7	8	8	8	8	8	8	8
Strategic Business Services	89	89	92	96	103	105	106	108	112	118	120	126
Operations Support Adm	2	1	1	1	1	1	1	2	2	2	2	3
TOTAL SITE SERVICES	**442**	**456**	**463**	**471**	**475**	**479**	**477**	**477**	**475**	**479**	**481**	**500**
Total Engineering Projects	20	20	19	19	19	20	20	21	21	21	21	20
Tot Plant Engineering	154	154	153	150	149	140	143	142	140	151	151	140
Tot Design Engineering	80	81	81	82	84	93	93	92	92	94	92	100
Nuclear Eng & Suppt Admin	1	1	1	1	1	1	1	1	1	1	1	1
Tot NFM	44	44	45	44	44	44	44	44	44	44	44	48
NUCLEAR ENGINEERING & SUPPORT	**299**	**300**	**299**	**296**	**297**	**298**	**301**	**300**	**298**	**311**	**309**	**309**
Reg Affairs/Plt Improv Adm	1	1	1	1	1	1	2	2	2	2	2	2
Tot Nuclear Oversight	36	36	37	37	35	35	39	39	39	38	39	39
Tot Nucregaffairs/Environment	13	13	14	15	15	15	14	14	15	15	17	17
TOTAL NUC REG & OVERSIGHT	**50**	**50**	**52**	**53**	**51**	**51**	**55**	**55**	**56**	**55**	**58**	**58**
Total EC / Safety Culture	4	4	4	4	3	3	3	3	3	4	4	4
Nuclear Executive Adm	8	7	7	7	18	24	27	26	26	28	28	28
Tot PV Human Resources	20	20	20	20	21	22	21	20	20	18	17	20
STATION SUPPORT	**32**	**31**	**31**	**31**	**42**	**49**	**51**	**49**	**49**	**50**	**49**	**52**

SCHEDULE H-7.4
PAGE 2 OF 5

EL PASO ELECTRIC COMPANY
2021 TEXAS RATE CASE FILING
SCHEDULE H-7.4: AVERAGE PERSONNEL ASSIGNED
SPONSOR: DAVID RODRIGUEZ/CAREY HARBOR/VICTOR MARTINEZ
PREPARER: WALTER KLINE/KARA RANDLE
FOR THE TEST YEAR ENDED SEPTEMBER 30,2024

	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
TOTAL UTILITY STAFFING	1,847	1,863	1,882	1,885	1,910	1,931	1,942	1,949	1,943	1,959	1,960	1,981
Contractors - Online	202	194	178	167	175	173	168	176	169	169	168	164
Contractors - Outage	0	0	0	0	0	0	0	0	0	0	0	0
Matrixed (Corporate)	58	58	57	56	56	55	51	52	56	57	56	55
TOTAL PVGS	2,107	2,115	2,117	2,128	2,141	2,159	2,161	2,177	2,168	2,185	2,184	2,200

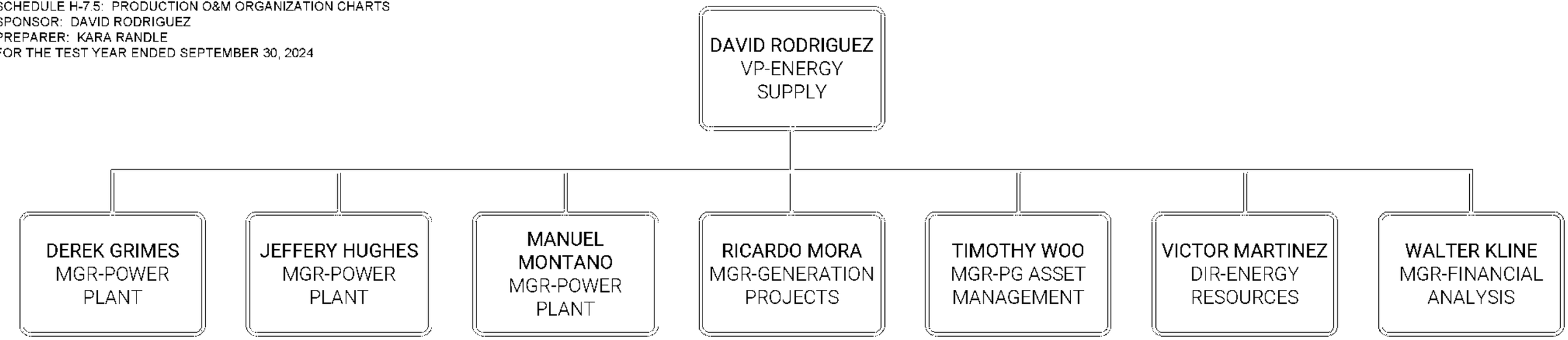
SCHEDULE H-7.4
PAGE 3 OF 5

2025 Budgeted Head Count

Organization	Dec-25
TOTAL OPERATIONS	305
TOTAL CHEMISTRY	38
TOT O&M MODS/PLANTS MGR ADMIN	7
TOTAL SITE MAINTENANCE	390
TOTAL SITE RAD PROTRECTION	84
TOTAL OUTAGE SERVICES	105
TOTAL WORK MANAGEMENT	34
NUCLEAR PRODUCTION	963
TOTAL RESOURCE MANAGEMENT	137
TOT NUCLEAR TRAINING	82
NUC OPERATIONS ADM	1
MANAGEMENT ASSIStANCE	9
INDUSTRIAL HEALTH & SAFETY	9
TOT NUC OPERATIONS	238
TOT PV HUMAN RESOURCES	20
NUCLEAR EXECUTIVE ADM	28
EMERGENT WORK FUND	-
SITE BASE PAYROLL	-
PVGS STATION SUPPORT SERVICES	-
ACCOUNTING ADJUSTMENTS	-
MATERIAL WRITE-OFFS	-
PVGS INSURANCE	-
STARS	-
COMMUNICATIONS	10
SAFETY CULTURE/EMPLOYEE CONCERNS	4
TOTAL STATION SUPPORT	62

TOT NUCLEAR OVERSIGHT	42
TOT NUCREGAFFAIRS/ENVIRONMENTL	16
REG AFFAIRS/PLANT IMPRV ADMIN	1
TOTAL NUCLEAR REG & OVERSIGHT	59
TOT STRATEGIC/BUSINESS PLANNING	3
TOT PV FACILITIES	61
PV FINANCAL BUSINESS OPS	11
TOT ADMIN CONTROLS/SUPPORT	61
STRAT BUS SVCS ADM	1
TOTAL WHSE/SUPPLY CHAIN	72
TOTAL EMERGENCY SERVICES	310
TOTAL PV INFORMATION TECH	-
OPERATIONS SUPPORT ADM	1
STATION SUPPORT ORG's	520
TOTAL ENGINEERING PROJECTS	26
TOT PLANT ENGINEERING	137
TOT DESIGN ENGINEERING	103
TOT NFM	53
NUCLEAR ENG & SUPPT ADMIN	1
Palo Verde Directs	2,162
Contractors - Online	118
Contractors - Outage	0
Matrixed (Corporate)	86
Total Palo Verde	2,366

Note: EPE has a 15.8% interest in the Palo Verde Generating Station (PVGS).
The power plant is managed by Arizona Public Service Company which serves as the operating agent for this jointly owned station. EPE does not employ any personnel in the production function of PVGS.
For information purposes, PVGS data is included on pages 2-5.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VP-ENERGY SUPPLY
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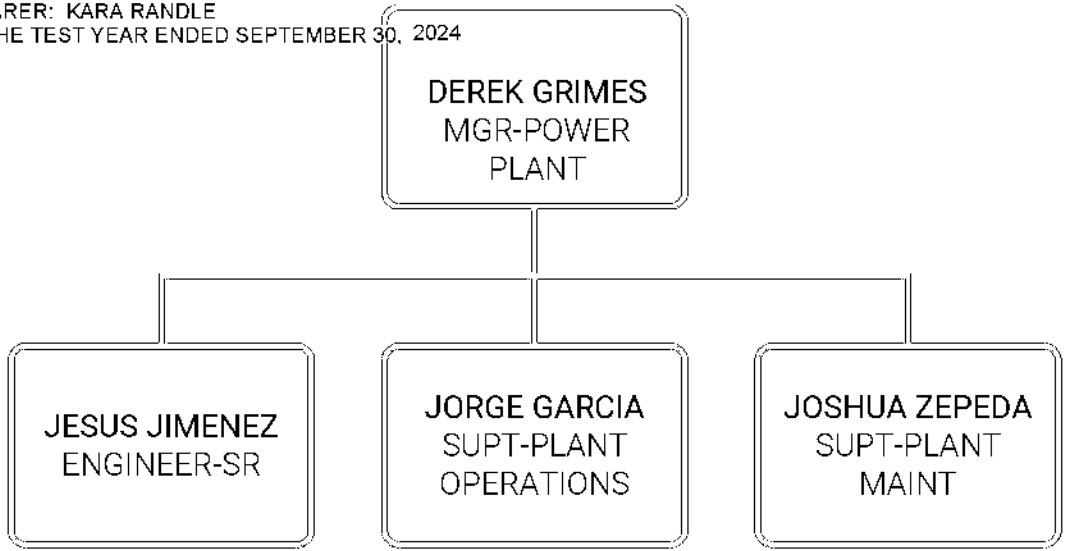
JEFFERY HUGHES
MGR-POWER PLANT
MANUEL MONTANO
MGR-POWER PLANT
RICARDO MORA
MGR-GENERATION PROJECTS
TIMOTHY WOO
MGR-PG ASSET MANAGEMENT
VICTOR MARTINEZ
DIR-ENERGY RESOURCES
WALTER KLINE
MGR-FINANCIAL ANALYSIS


DEREK GRIMES
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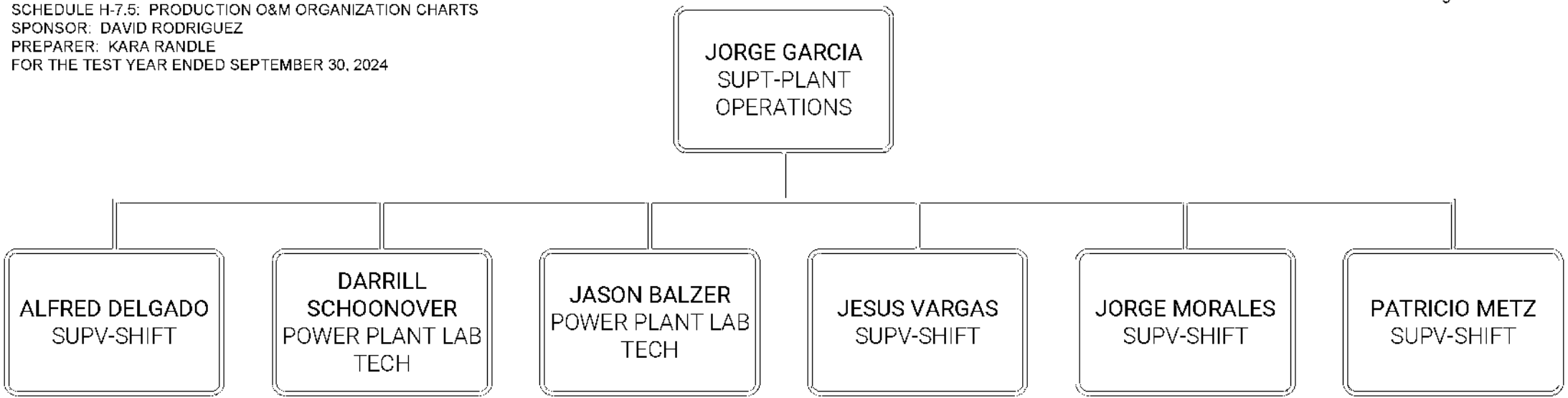
ENGINEER-SR
JORGE GARCIA
SUPT-PLANT OPERATIONS
JOSHUA ZEPEDA
SUPT-PLANT MAINT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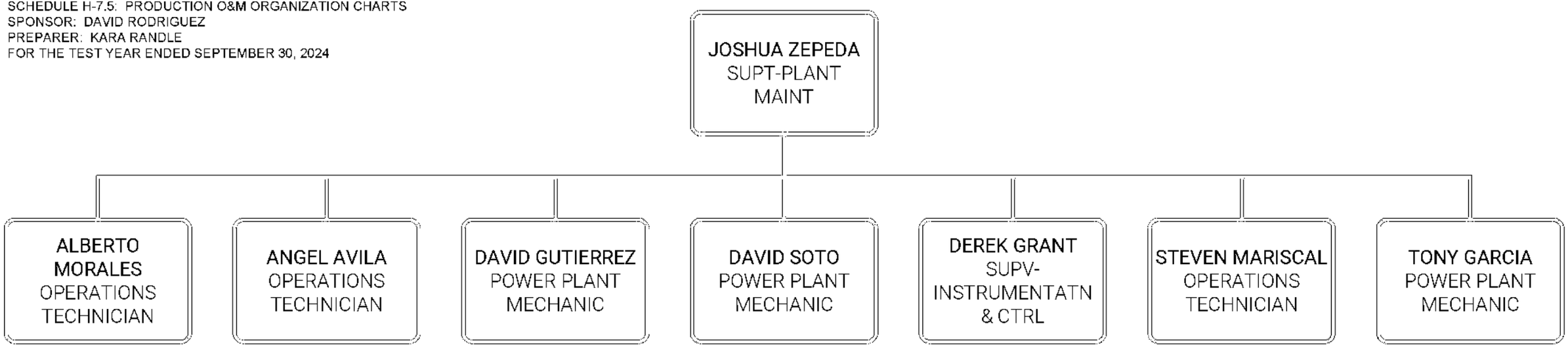
SUPV-SHIFT
JORGE MORALES
SUPV-SHIFT
PATRICIO METZ
SUPV-SHIFT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ANGEL AVILA
OPERATIONS TECHNICIAN
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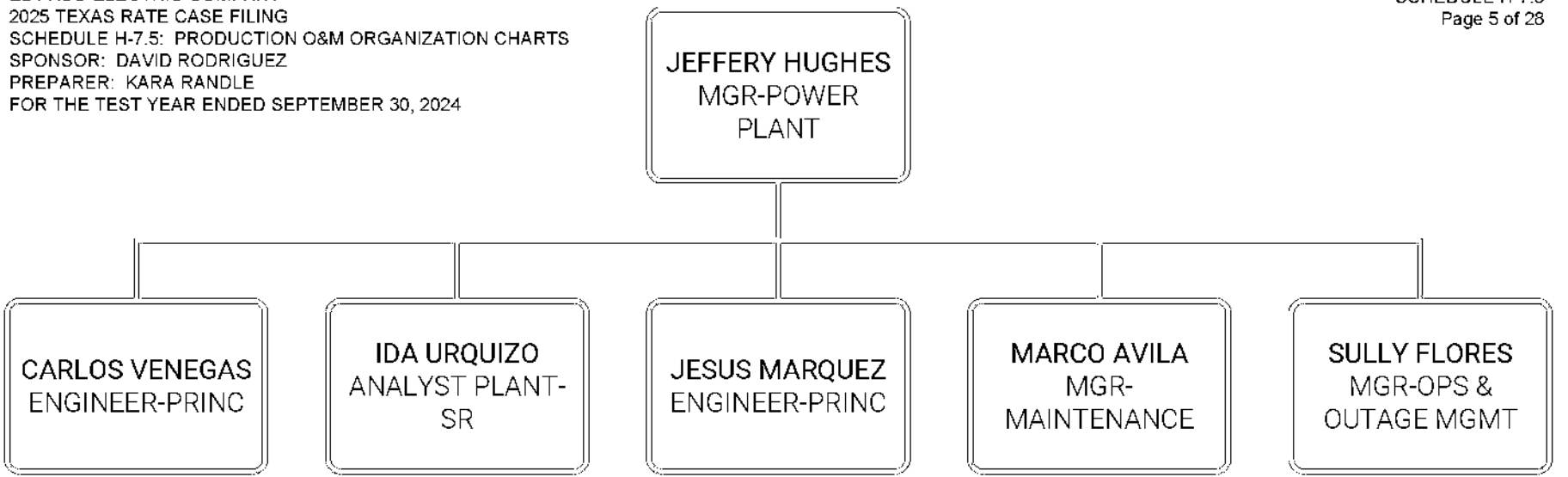
POWER PLANT MECHANIC
DAVID SOTO
POWER PLANT MECHANIC
DEREK GRANT
SUPV-INSTRUMENTATN & CTRL
STEVEN MARISCAL
OPERATIONS TECHNICIAN
TONY GARCIA
POWER PLANT MECHANIC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CARLOS VENEGAS
ENGINEER-PRINC
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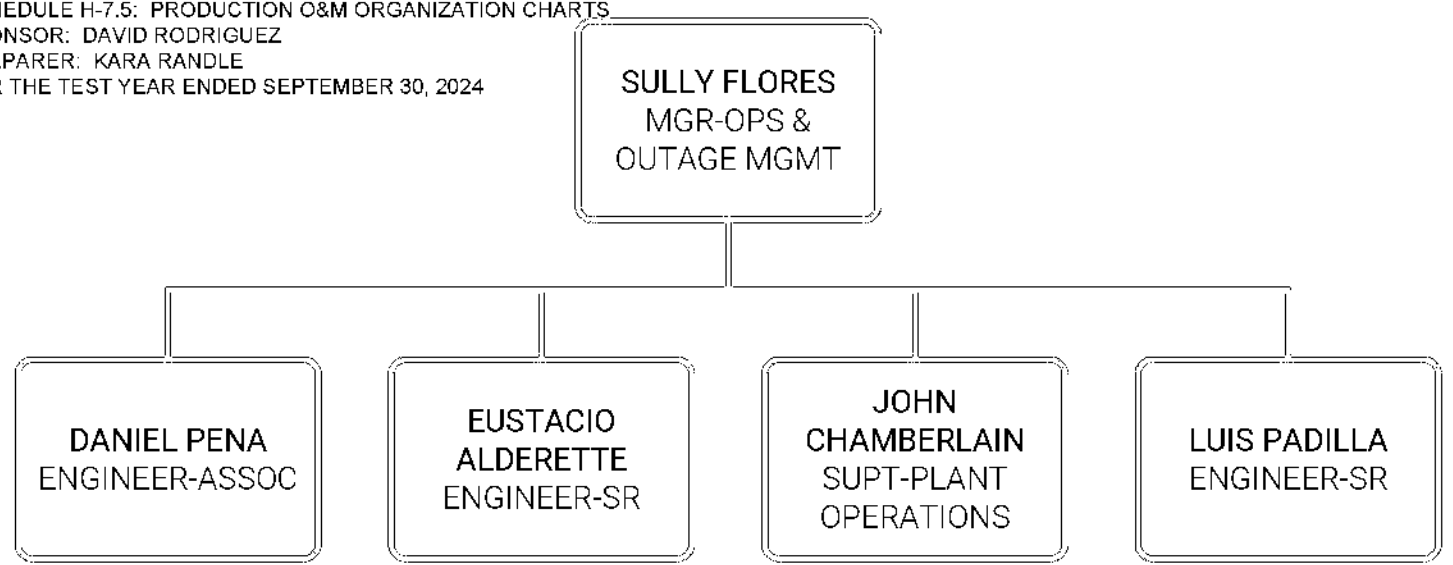
ENGINEER-PRINC
MARCO AVILA
MGR-MAINTENANCE
SULLY FLORES
MGR-OPS & OUTAGE MGMT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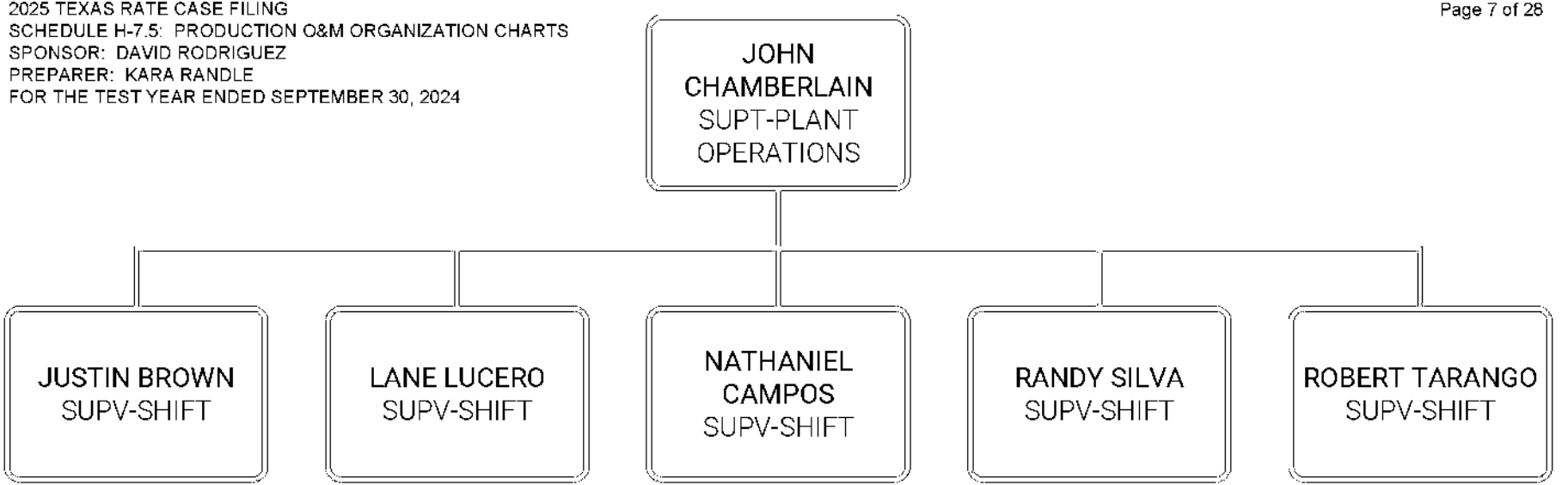
SUPT-PLANT
OPERATIONS
LUIS PADILLA
ENGINEER-SR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SUPV-SHIFT
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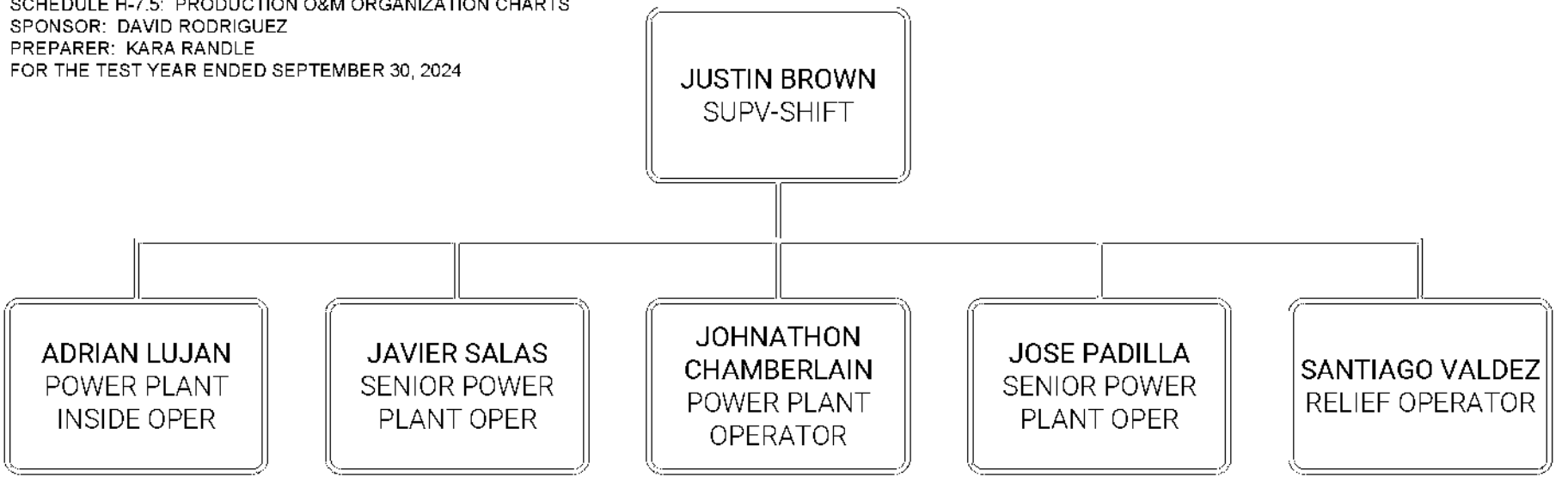
RANDY SILVA
SUPV-SHIFT
ROBERT TARANGO
SUPV-SHIFT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JAVIER SALAS
SENIOR POWER
PLANT OPER
JOHNATHON
CHAMBERLAIN
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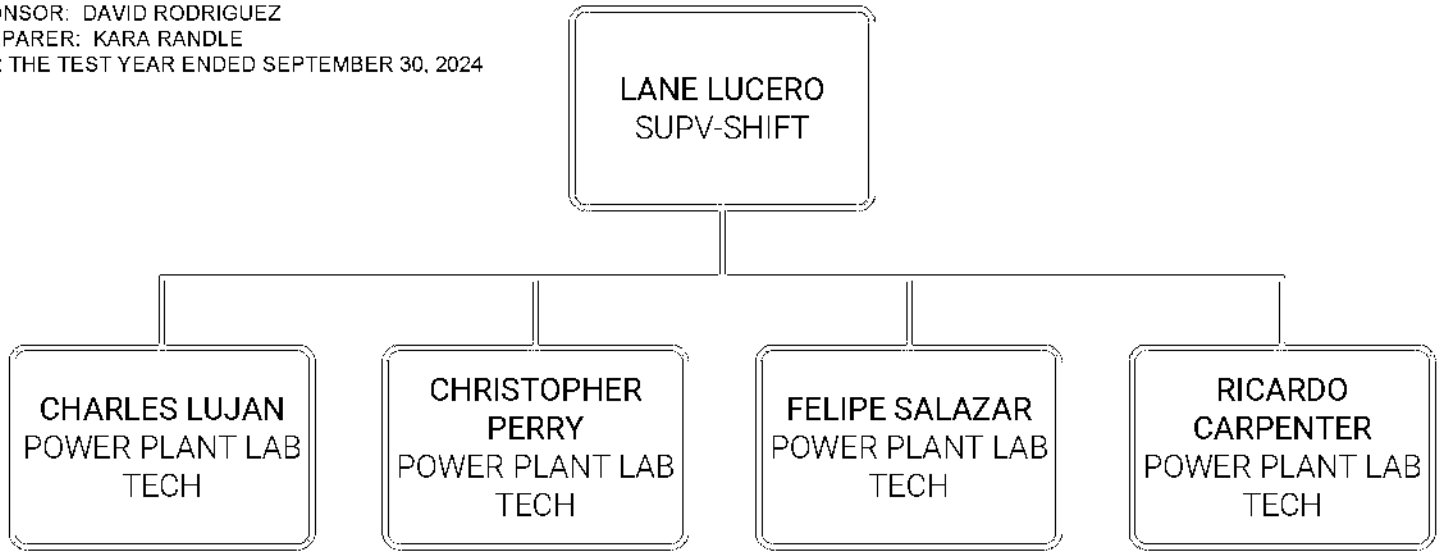
OPERATOR
JOSE PADILLA
SENIOR POWER
PLANT OPER
SANTIAGO VALDEZ
RELIEF OPERATOR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CHARLES LUJAN
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FELIPE SALAZAR
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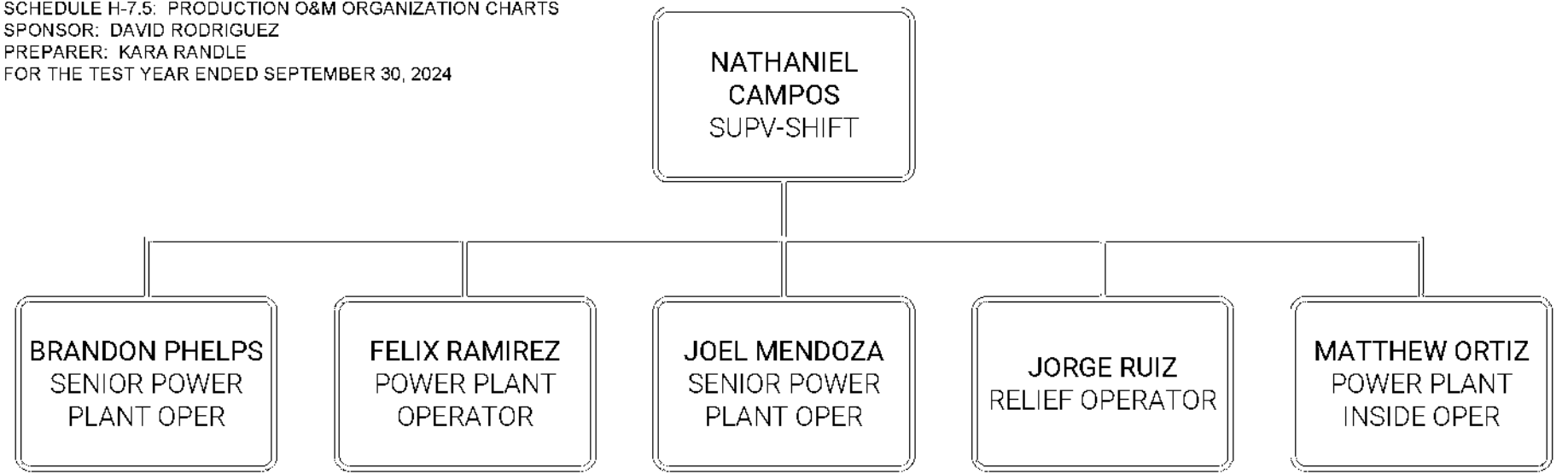
RICARDO CARPENTER
POWER PLANT LAB TECH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FELIX RAMIREZ
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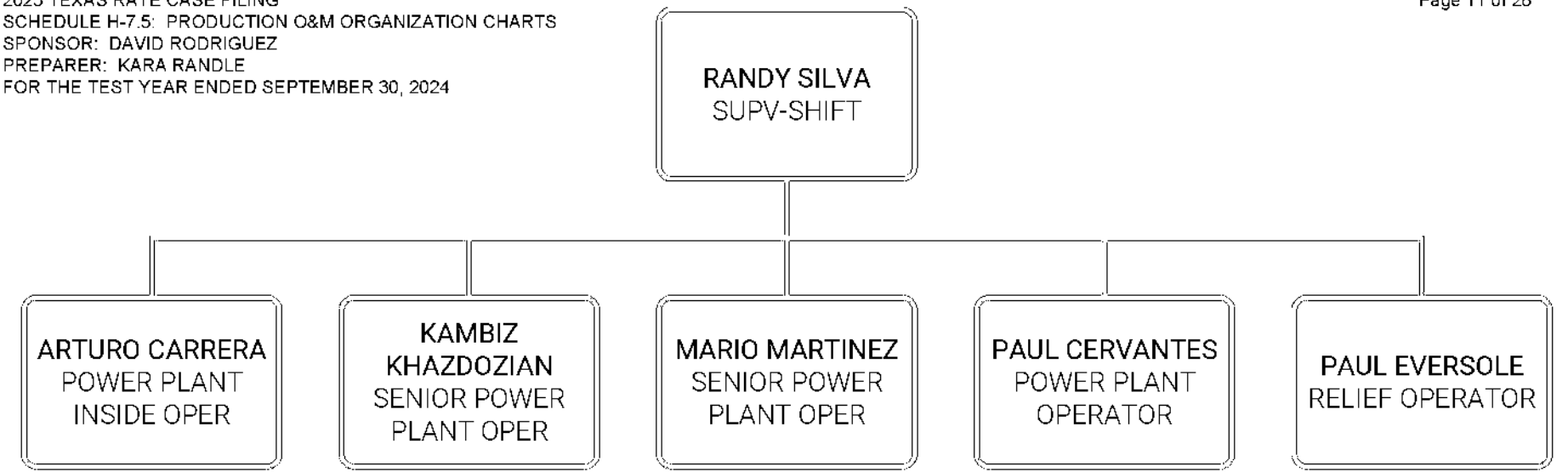
MATTHEW ORTIZ
POWER PLANT INSIDE OPER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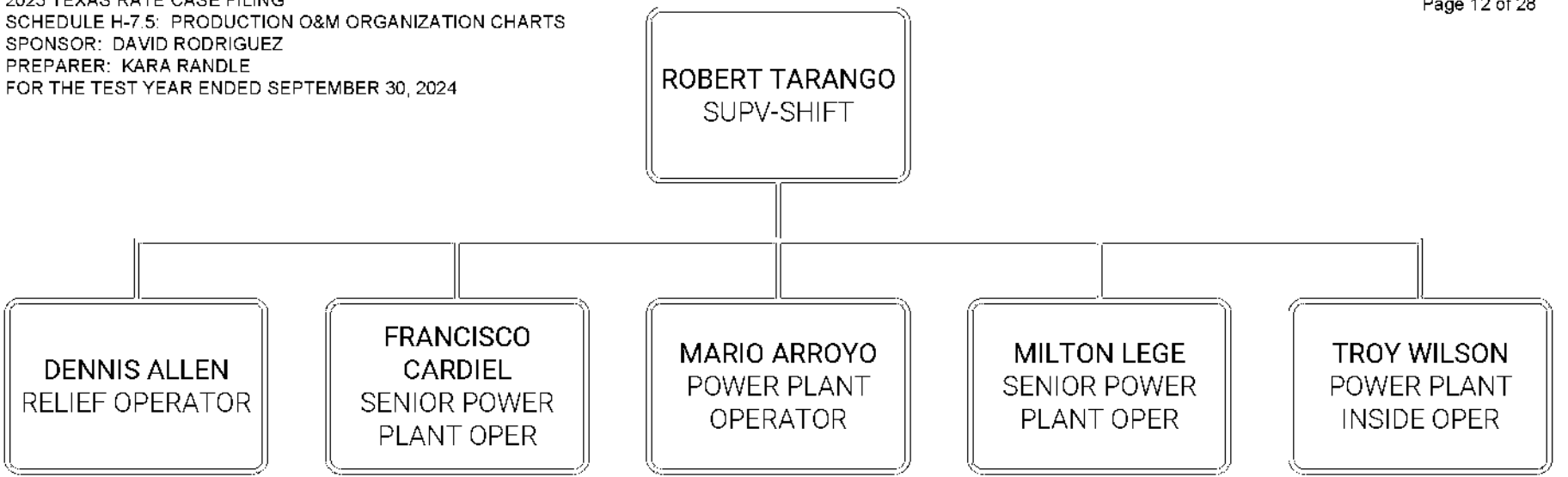
PAUL EVERSOLE
RELIEF OPERATOR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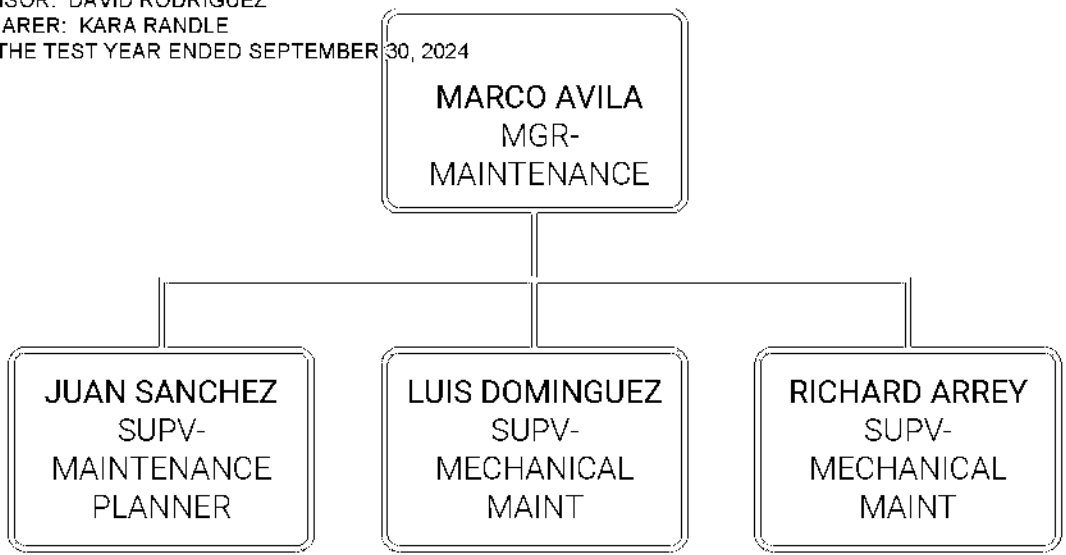
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RICHARD ARREY
SUPV-
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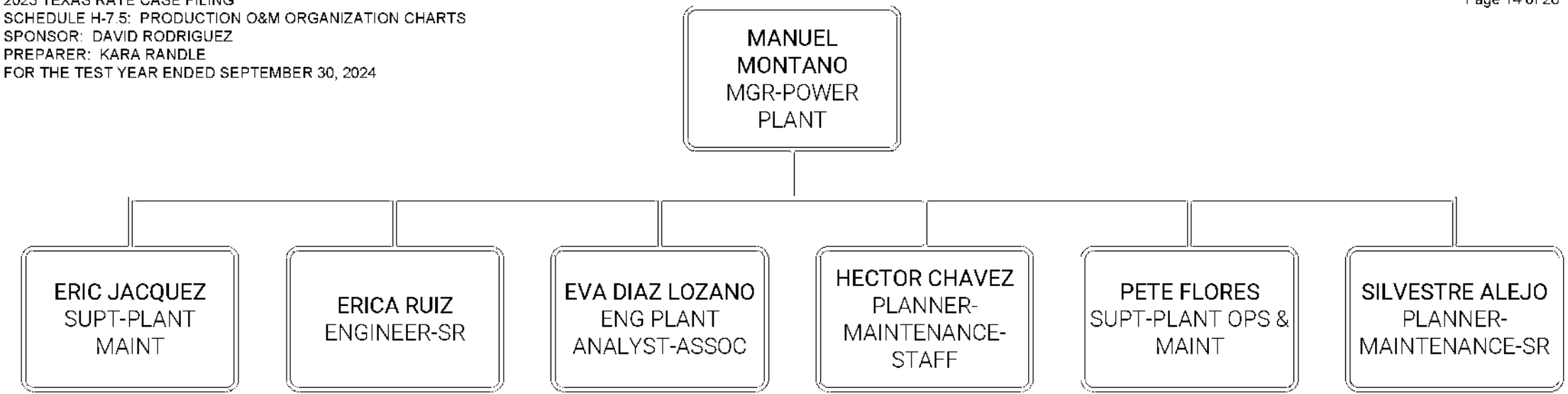
MAINT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HECTOR CHAVEZ
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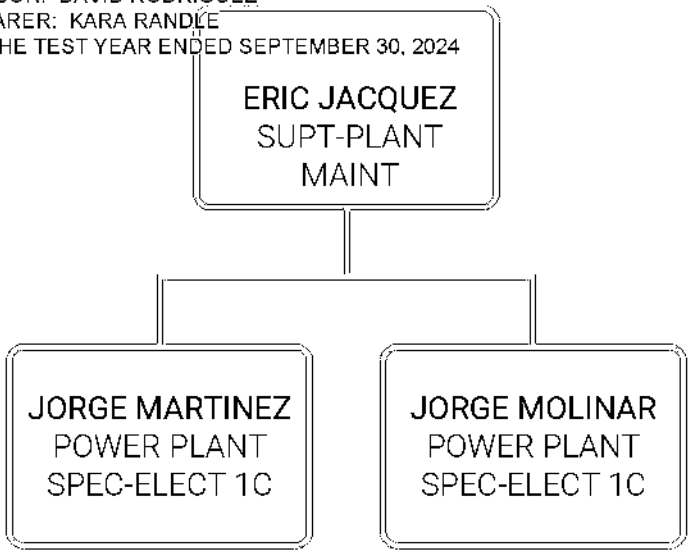
PETE FLORES
SUPT-PLANT OPS & MAINT
SILVESTRE ALEJO
PLANNER-MAINTENANCE-SR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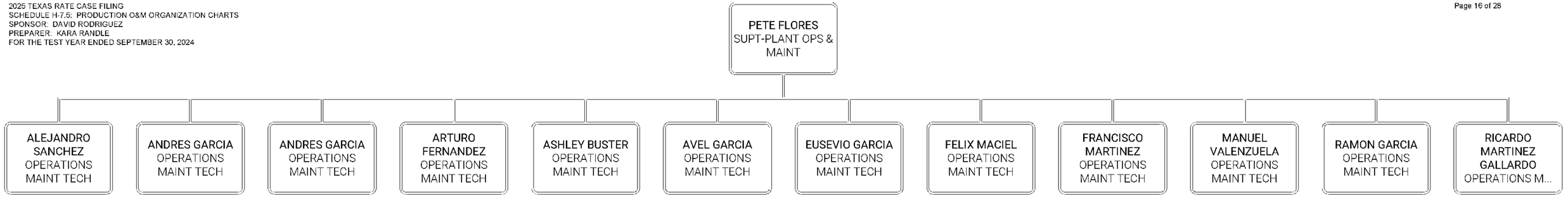
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ASHLEY BUSTER
OPERATIONS MAINT TECH
AVEL GARCIA
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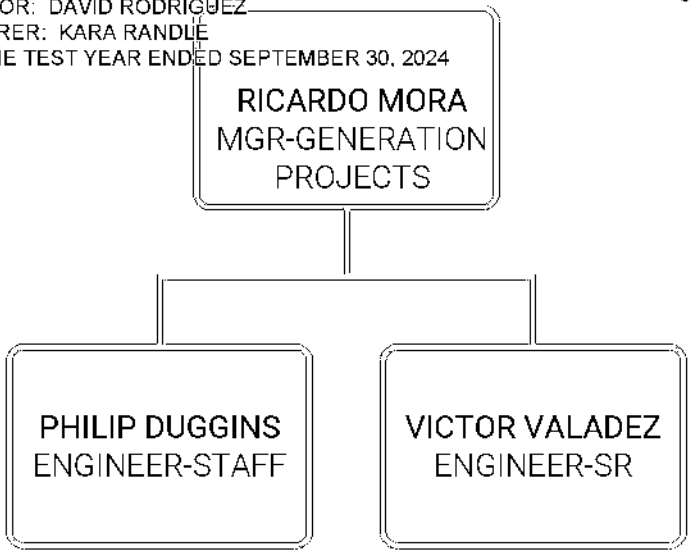
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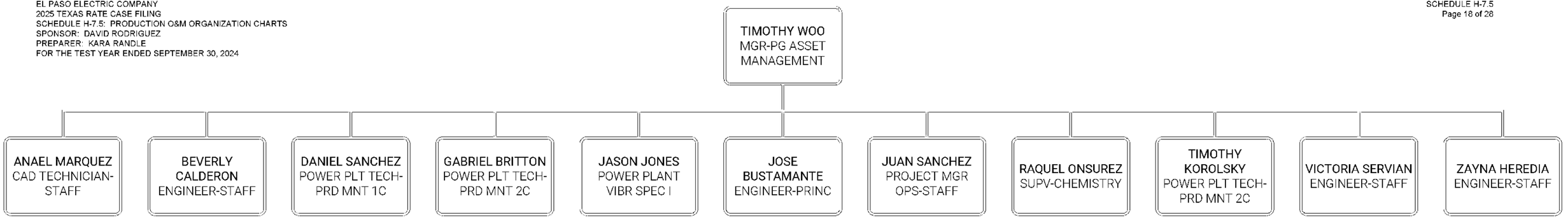
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GABRIEL BRITTON
POWER PLT TECH-PRD MNT 2C
JASON JONES
POWER PLANT VIBR SPEC I
JOSE BUSTAMANTE
ENGINEER-PRINC
JUAN SANCHEZ
PROJECT MGR OPS-STAFF
RAQUEL ONSUREZ
SUPV-CHEMISTRY
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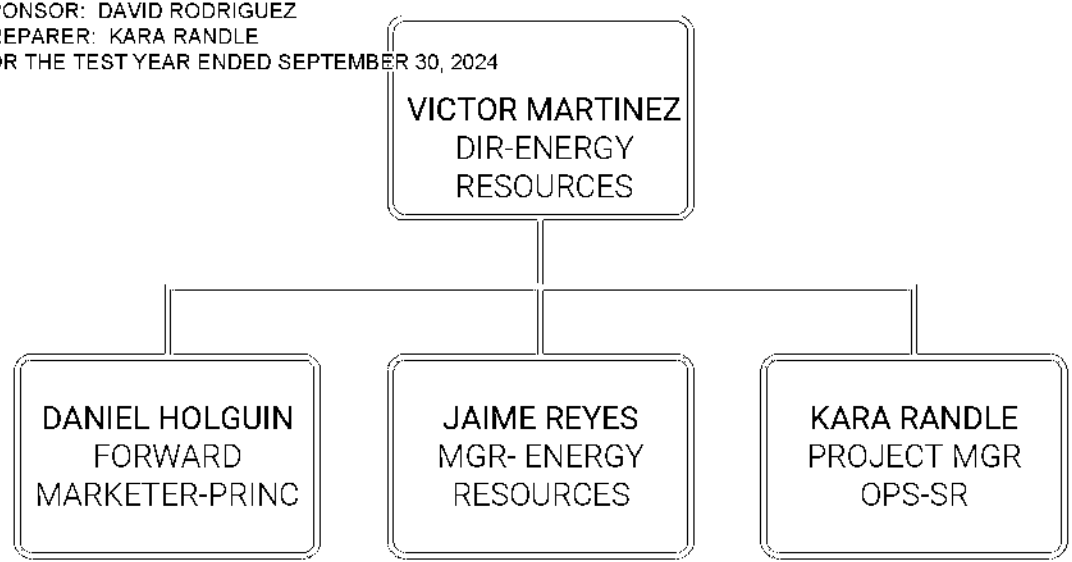
ZAYNA HEREDIA
ENGINEER-STAFF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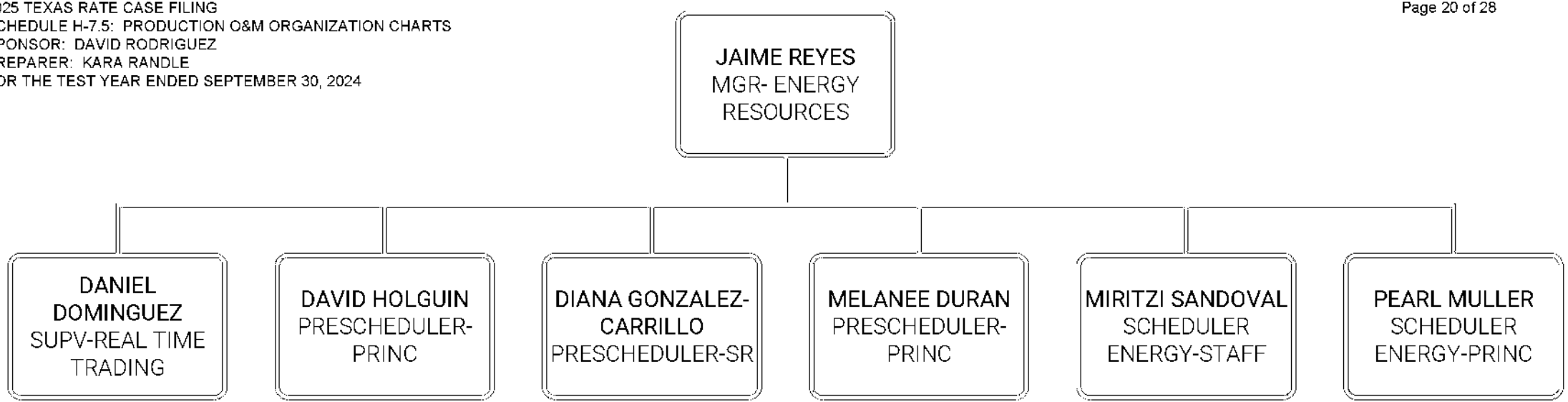
FORWARD MARKETER-PRINC
JAIME REYES
MGR- ENERGY RESOURCES
KARA RANDLE
PROJECT MGR OPS-SR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DANIEL DOMINGUEZ
SUPV-REAL TIME TRADING
DAVID HOLGUIN
PRESCHEDULER-PRINC
DIANA GONZALEZ-CARRILLO
PRESCHEDULER-SR
MELANEE DURAN
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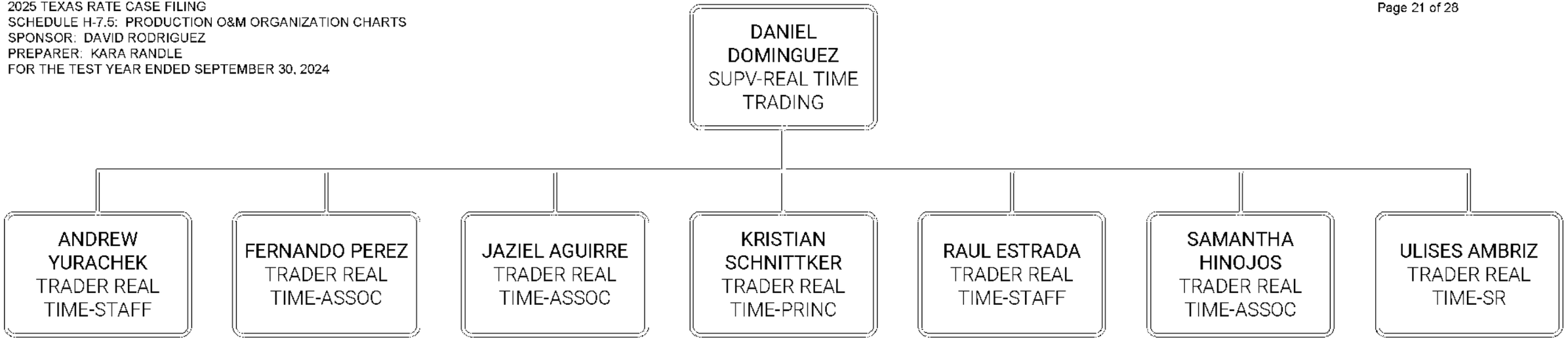
MIRITZI SANDOVAL
SCHEDULER ENERGY-STAFF
PEARL MULLER
SCHEDULER ENERGY-PRINC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SUPV-REAL TIME TRADING
ANDREW YURACHEK
TRADER REAL TIME-STAFF
FERNANDO PEREZ
TRADER REAL TIME-ASSOC
JAZIEL AGUIRRE
TRADER REAL TIME-ASSOC
KRISTIAN SCHNITTKER
TRADER REAL TIME-PRINC
RAUL ESTRADA
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SAMANTHA HINOJOS
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ULISES AMBRIZ
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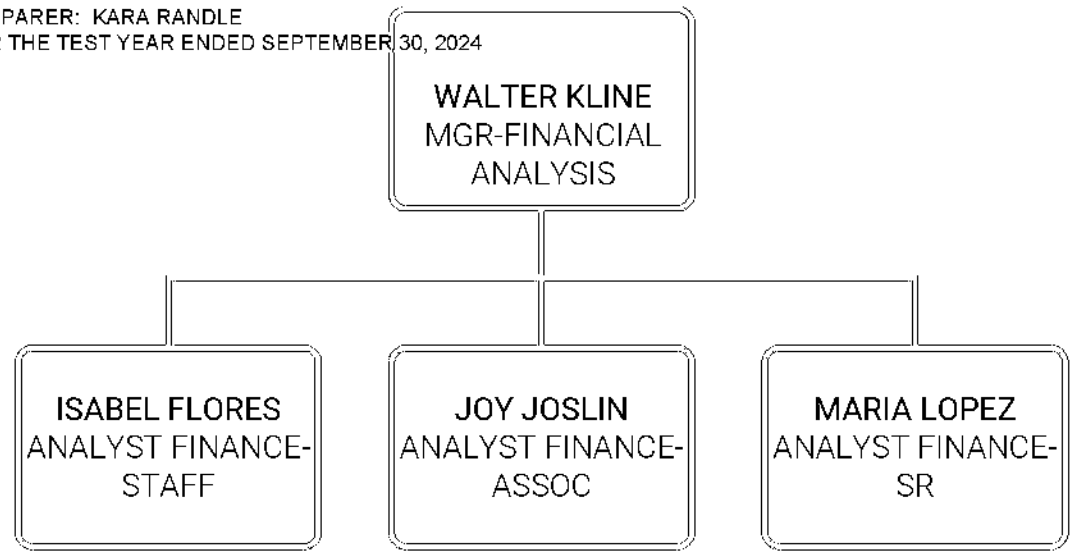
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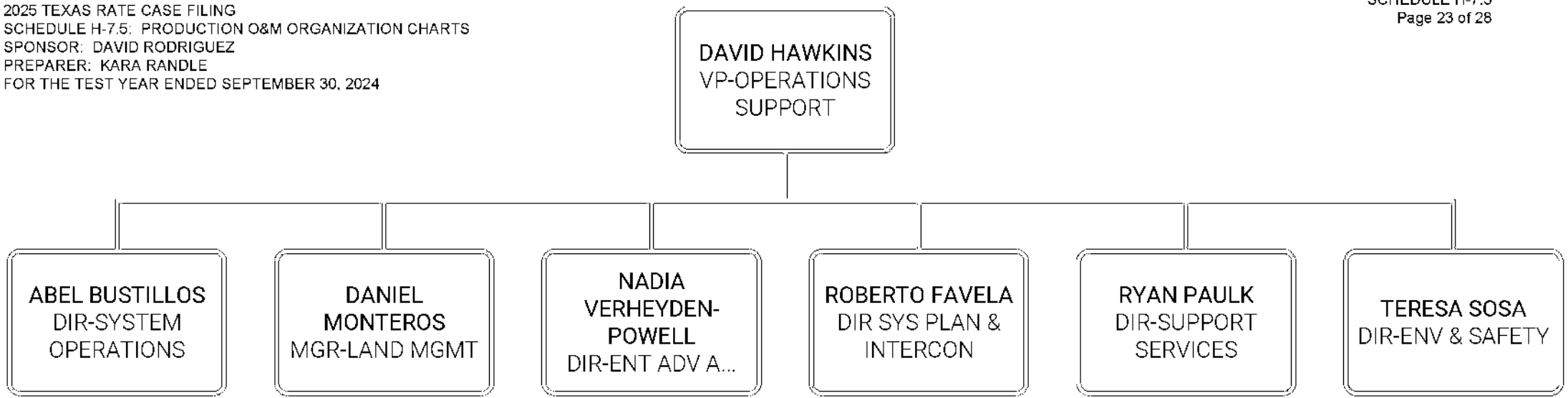
JOY JOSLIN
ANALYST FINANCE-ASSOC
MARIA LOPEZ
ANALYST FINANCE-SR


DAVID HAWKINS
VP-OPERATIONS SUPPORT
ABEL BUSTILLOS
DIR-SYSTEM OPERATIONS
DANIEL MONTEROS
MGR-LAND MGMT
NADIA VERHEYDEN-POWELL
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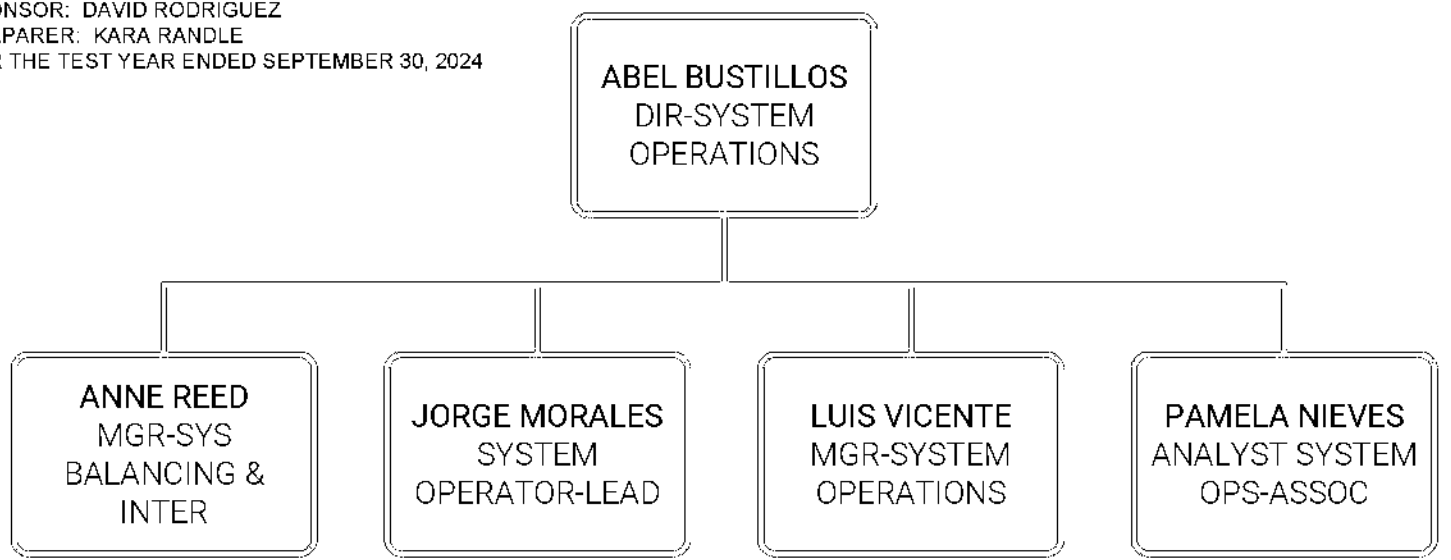
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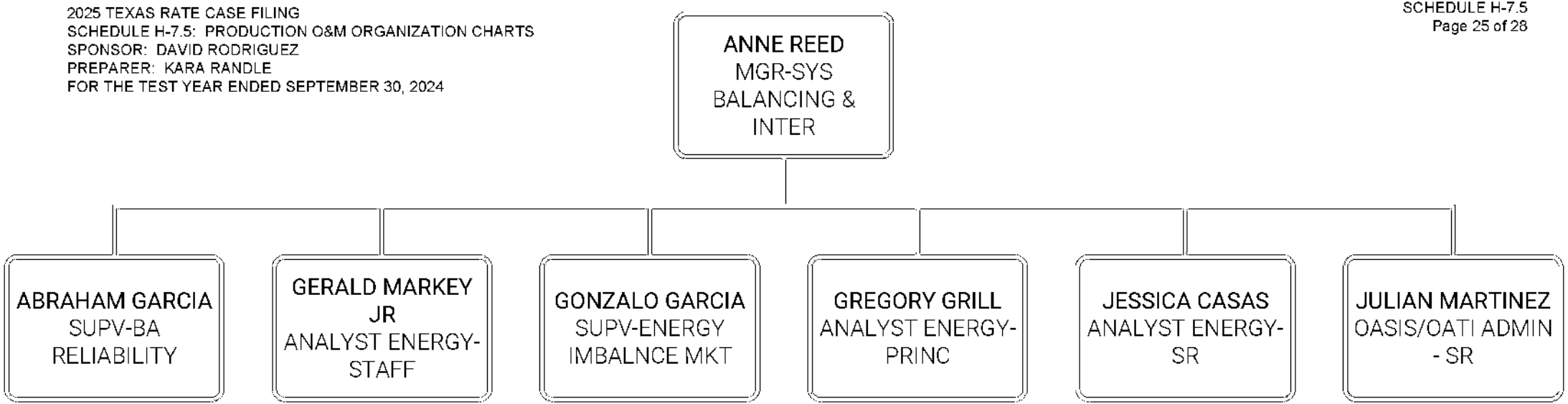
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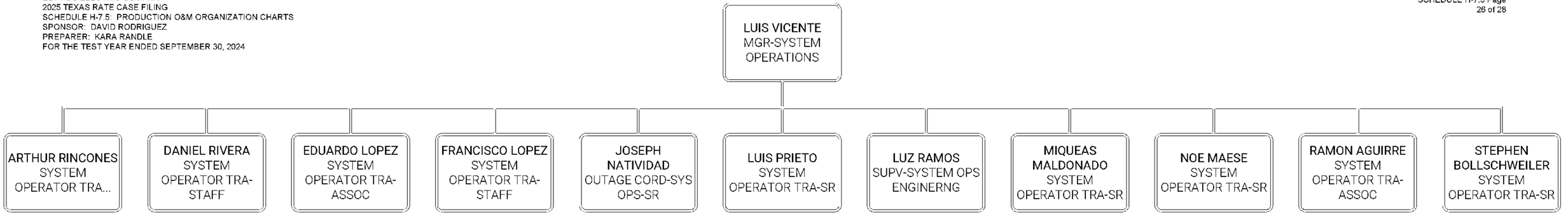
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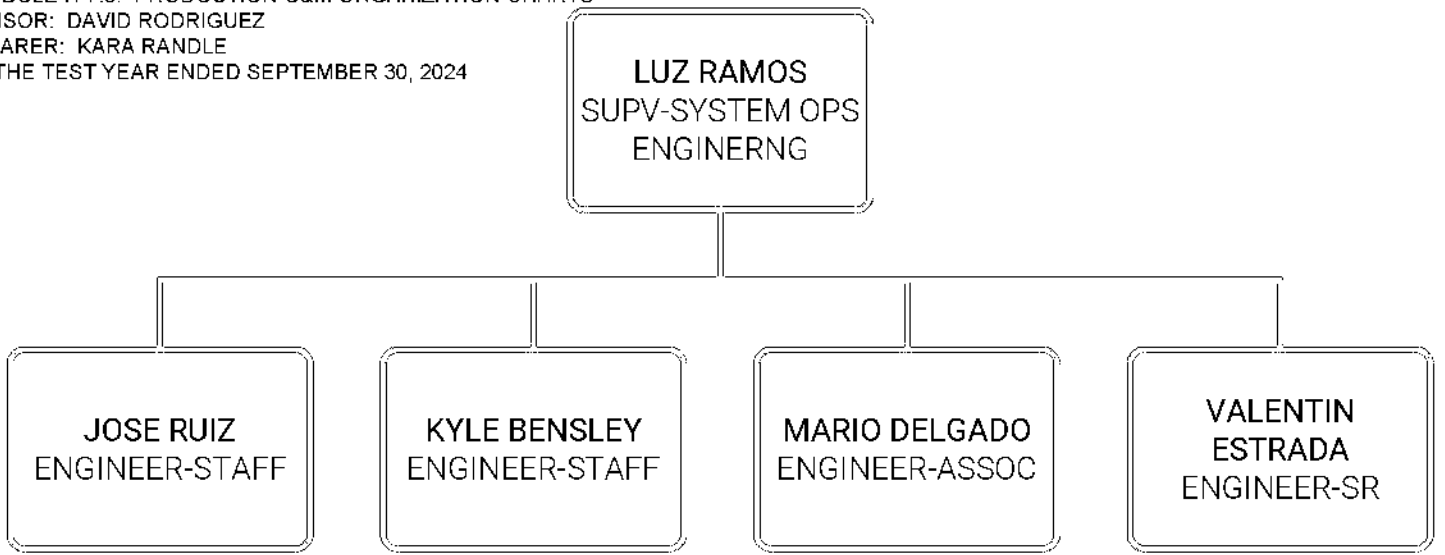
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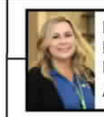

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PaloVerde GENERATING STATION

September 2024

Operations Programs at El Paso Electric Company's Wholly Owned Plants

Heat Rate/Energy Utilization Awareness: Plant operations and staff personnel are sensitive to unit performance and the impact that efficient fuel utilization has on generation cost. There are specifically targeted parameters that are monitored to give an overall performance pulse on each generating unit. Deficiencies are addressed as soon as practical considering unit system demand and outage scheduling availability when an outage is required to correct a deficiency. Deficiencies that can be immediately addressed are corrected promptly by operator intervention or maintenance action. The Company conducts annual testing of all generating units to evaluate unit thermal performance and to identify and correct deficiencies that impact either heat rate or capacity of the unit.

Combustion Tuning: Strong focus is maintained on keeping boiler and gas turbine combustion controls operating in an optimum manner to ensure that fuel combustion is occurring in the most efficient manner possible. Managing the combustion process is the single most critical parameter to insuring effective fuel utilization. Operations personnel and maintenance technicians are trained to monitor and respond with high priority to any negative trends in this area. At Rio Grande, all the boilers are tuned on an annual basis, in order to fulfill the environmental regulations as required by the state of New Mexico. At Newman, all boilers are tuned and continuously monitored to fulfill the environmental regulations that are required by the state of Texas.

Energy Efficiency Awareness: Operations and plant staff have attended various training classes that focus specifically on efficient energy conversion both on steam as well as turbine driven units. These classes focus on parameters impacting the efficient conversion of energy in an optimum manner and deviation from optimum. Factors including air/fuel ratios, burner air-fuel mixing, combustion process time, heat transfer, boiler circulation, main steam pressures and temperatures, turbine backpressure, heat removal in the cooling system are all familiar topics to operations and staff personnel. Our heat rate monitoring system actually performs real time tracking of the top ten parameters. Though there are other factors that impact unit thermal performance, the monitoring of such gives us the ability to view monthly trends and note action items for corrective action.

Process Improvement: A continuous effort is maintained on identifying opportunities for improvement in management of the preventive and predictive maintenance program with the goal of optimizing unit reliability. Operations play a key role in the management of this program.

Note: No system-wide production operations studies have been performed in the last 5 years.

Maintenance Programs at El Paso Electric Company's Wholly Owned Plants

Water Chemistry Management: Improvements to overall water management in the plants and boiler and cooling cycle chemistry controls has resulted in reduced mild steel and alloy corrosion. A tighter limitation on critical cooling and boiler water chemistry parameters has also resulted in well managed turbine and boiler deposition rates. This results in reduced maintenance component life cycle costs.

Boiler Tube Replacement and Condenser Re-tubing: Several boiler tube bundles have been replaced. This effort reduces unplanned plant capacity limitations and water chemistry upsets which result in off design unit operation and decreased thermal efficiency. In addition, re-tubing of spent lifecycle condenser tubes, improves condenser heat removal capability and reduced maintenance costs due to condenser tube leaks.

Component /System Performance Testing: Plants perform critical system component testing in order to evaluate equipment performance and its impact on overall unit efficiency. This test information is also used in upgrade/repair/replace decisions. This information also provides key information for extended life commitments and reliability on several of the older fleet units.

Predictive/Preventive Maintenance Programs: The plants continue to improve and expand the technologies utilized in the predictive maintenance program. Ultrasonic testing for leak detection, valve leak by, reheat super heater and internal boiler leak detection has been added to the program. In addition, electric motor testing during scheduled maintenance outages gives information on expected motor condition and allows for planned motor maintenance as opposed to unplanned, more costly outages. Vibration monitoring and analysis provides valuable information on rotating equipment condition. Ferrography, or oil condition analysis, is another key component of our predictive/preventative maintenance program. Infrared Thermography is used throughout the plants by certified techs to detect problems with electrical systems, boilers, and other equipment.

Life Extension/Reliability Upgrades: The older units have had life extension reviews performed with many of the recommendations incorporated into the maintenance plan. This has allowed the Company the option to continue unit operations with high expected reliabilities until such time as new units can be phased into the fleet.

Boiler /Turbine Control Upgrades: All units have had either (i) boiler control upgrades, or (ii) boiler and turbine control upgrades over the past six years. This gives operations and maintenance personnel the ability to focus on maintaining tighter, more efficient combustion controls with reduced operating cyclic stresses on boilers, turbines and aged pressure components. In addition, this allows the combustion process to be more efficiently managed resulting in improved unit thermal efficiency.

Major Turbine/Boiler Inspections: The local units have been maintained on an industry accepted schedule with major inspections of critical components performed on a targeted eight-year frequency (dependent on operational run hours during the period) for steam units. Combustion turbines are maintained as close to the recommended equipment manufacturers recommended frequency as operationally possible. During major inspections, all critical auxiliary equipment due for maintenance is also inspected as part of the overall goal of achieving high reliability with optimum performance, thus minimizing costs.

LMS100 GE System Bulletin Upgrades: The LMS100 units have recommended system bulletins that GE Engineering (OEM) identifies for owners to incorporate in their maintenance for unit reliability. The system bulletins are performed, if applicable, during annual maintenance outages.

Note: No system-wide production maintenance studies were performed in the past five years.

2023 DECOMMISSIONING COST STUDY

for the

PALO VERDE NUCLEAR GENERATING STATION

Prepared for

Arizona Public Service Company

prepared by

TLG Services, LLC
Bridgewater, Connecticut

December 2023

APPROVALS

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TABLES

APPENDICES

REVISION LOG

No.	Date	Item Revised	Reason for Revision
0	12/19/2023		Original Issue

ACRONYMS / DEFINITIONS

- AIF — Atomic Industrial Forum
- ALARA — As-Low-As-Reasonably Achievable
- APS — Arizona Public Service
- CERCLA — Comprehensive Environmental Response, Compensation, and Liability Act
- CWS — Circulating Water System
- DAW — Dry Active Waste
- DCE — Decommissioning Cost Estimate (Used interchangeably with Decommissioning Cost Study)
- DOC — Decommissioning Operations Contractor
- DOE — Department of Energy
- DOT — Department of Transportation
- EPA — Environmental Protection Agency
- FA — Fuel assembly
- GTCC — Greater Than Class C
- IPs — Industrial Packages
- ISFSI — Independent Spent Fuel Storage Installation
- kW — Kilowatt
- LLRW — Low Level Radioactive Waste
- LTP — License Termination Plan
- LSA — Low Specific Activity
- MARSSIM — Multi-Agency Radiation Survey & Site Investigation Manual
- MOU — Memorandum of Understanding
- MW — Megawatt
- NESP — National Environmental Studies Project
- NRC — Nuclear Regulatory Commission
- NSSS — Nuclear Steam Supply Systems
- NWPA — Nuclear Waste Policy Act
- OA — Operating Agent (This term may transition to Decommissioning Agent (DA) upon cessation of plant operations.)
- P&IDs — Piping & Instrument Diagrams
- PERT — Program Evaluation and Review Technique
- PSDAR — Post-Shutdown Decommissioning Activities Report
- Palo Verde — Palo Verde Nuclear Generating Station
- RPV — Reactor Pressure Vessel
- SCO — Surface Contaminated Object
- TEDE — Total Effective Dose Equivalent
- TLG — TLG Services, LLC.
- UFSAR — Updated Final Safety Analysis Report

EXECUTIVE SUMMARY

This analysis, prepared for the Operating Agent (OA) of the Palo Verde Nuclear Generating Station (Palo Verde) by TLG Services, LLC. (TLG), evaluates the cost to decommission Palo Verde following the final cessation of plant operations. The total projected station cost for the DECON alternative is estimated at $3.81 billion, reported in 2023 dollars. The cost estimate includes the decommissioning of the three Palo Verde nuclear units, plus the decommissioning of the Water Reclamation Facility, the Water Reclamation Supply System Pipeline & Structures, the Evaporation Ponds, the Make-up Water Reservoirs, the Independent Spent Fuel Storage Facility (ISFSI), the Stored Steam Generators & Storage Facility (facility for storage of six retired steam generators), and the Stored Reactor Closure Heads & Storage Facility.

The major cost contributors to the overall decommissioning cost are labor, radioactive waste disposal, and other removal-related activities (e.g., engineering, support equipment, capital expenditures for spent fuel containers). The costs are based on several key assumptions, including regulatory requirements, estimating methodology, contingency requirements, low-level radioactive waste disposal availability, high-level radioactive waste disposal options, and site restoration requirements.

It should be noted that the estimating methodology was modified to align costs more evenly across Palo Verde Units 1, 2, and 3. Early planning and pre-shutdown costs for utility staff between 2040 and 2045 were allocated only to Unit 1 in previous DCEs, due to it being the first unit that shuts down. In the 2023 DCE, these costs have been allocated evenly where possible across the three units. Also, in previous DCEs, costs for dismantling the common systems and structures were allocated only to Unit 3, since it is the last unit to shut down. In the 2023 DCE, these costs have been allocated as evenly as possible across the three units.

The costs to decommission Palo Verde are evaluated for the DECON decommissioning alternative. The estimate assumes the eventual removal of all the contaminated and activated plant components and structural materials, such that the facility operator may then have unrestricted use of the site with no further requirement for an operating license.

This study provides an estimate for decommissioning Palo Verde under current requirements and is based on present-day costs and available technology. Cost summaries for the various facilities are provided at the end of this section for the major cost components. In addition, the estimate includes the costs to transfer spent fuel from the spent fuel storage pools to the DOE, and to transfer fuel from the ISFSI to the DOE. These costs are shown in Appendix L. This is consistent with the OA's assumption that most ISFSI / spent fuel related operational, maintenance and capital

costs will be paid by reimbursements from the DOE. Costs for the transfer of spent fuel from the spent fuel storage pool to the ISFSI are also shown in appendix L.

The decommissioning scenario analyzed for this estimate is described in Section 2. The assumptions are presented in Section 3. A decommissioning timeline and sequence of decommissioning activities are provided in Section 4 and Appendix D. The major cost contributors are identified in Section 6, and schedules of annual expenditures provided in Appendix B and Appendix O.

Detailed activity costs for each nuclear unit are provided in Appendix C. Detailed costs for the other facilities are provided in Appendices G, H, I, J, K, L, M, and N.

DECOMMISSIONING COST SUMMARY

		Cost, 2023$ [1] (thousands)	Schedule (years)
UNIT 1 (Appendix C-1)			
PRE-SHUTDOWN			
Early Planning Prior to Shutdown		2,424	5.0
PREPARATIONS			
Post-Shutdown Transition		129,263	1.0
Decommissioning Preparations		81,706	0.5
DECOMMISSIONING			
NSSS Removal		345,963	1.9
Site Decontamination		278,051	2.6
Decontamination Following Wet Fuel		36,740	0.5
Delay Before License Termination		18,262	2.5
License Termination		29,367	0.8
SITE RESTORATION			
Site Restoration		64,154	1.9
GTCC shipping		25,020	0.04
	Subtotal	1,011,251	16.7
UNIT 2 (Appendix C-2)			
PRE-SHUTDOWN			
Early Planning Prior to Shutdown		2,424	5.0
PREPARATIONS			
Post-Shutdown Transition		97,854	0.7
Decommissioning Preparations		52,252	0.3
DECOMMISSIONING			
NSSS Removal		383,278	1.9
Site Decontamination		303,056	3.1
Decontamination Following Wet Fuel		36,622	0.5
Delay Before License Termination		11,413	1.6
License Termination		29,158	0.8
SITE RESTORATION			
Site Restoration		64,370	1.9
GTCC shipping		25,020	0.04
	Subtotal	1,005,448	15.8

[1] Columns may not add due to rounding

DECOMMISSIONING COST SUMMARY
(continued)

	Cost, 2023$ [1] (thousands)	Schedule (years)
Unit 3 (Appendix C-3)		
PRE-SHUTDOWN		
Early Planning Prior to Shutdown	2,424	5.0
PREPARATIONS		
Post-Shutdown Transition	97,854	0.7
Decommissioning Preparations	52,252	0.3
DECOMMISSIONING		
NSSS Removal	348,366	1.9
Site Decontamination	342,292	3.1
Decontamination Following Wet Fuel	42,193	0.5
License Termination	29,157	0.8
SITE RESTORATION		
Site Restoration	64,547	1.9
GTCC shipping	25,020	0.04
Subtotal	1,004,106	14.2
ISFSI (Appendices L and N)		
ISFSI Operations / Spent Fuel Transfer (Unit 1, 2, & 3 Shutdown until End of Spent Fuel Transfer to DOE	467,642	n/a
ISFSI License Termination	24,024	n/a
ISFSI Demolition and Site Restoration	15,058	n/a
ISFSI Campaign Costs	16,750	n/a
Subtotal	523,475	

[1] Columns may not add due to rounding

DECOMMISSIONING COST SUMMARY
(continued)

	Cost, 2023$ [1] (thousands)	Schedule (years)
OTHER FACILITIES		
Stored Steam Generators & Storage Facility (Appendix G)	88,185	n/a
Water Reclamation Facility (Appendix H)	12,988	n/a
Water Reclamation Supply System Pipeline & Structures (Appendix I)	75,452	n/a
Evaporation Ponds (Appendix J)	77,061	n/a
Make-up Water Reservoirs (Appendix K)	6,259	n/a
Stored Reactor Closure Heads & Storage Facility (Appendix M)	9,898	n/a
Subtotal	269,843	
STATION TOTAL	**3,814,123**	

[1] Columns may not add due to rounding

SUMMARY TABLE: LICENSE TERMINATION, SPENT FUEL MANAGEMENT AND NON-NUCLEAR COST

	License Termination		Spent Fuel Management		Site Restoration		Total Cost[1] (thousands)
Unit 1 (Appendix C-1)	915,877	(91%)	24,534	(2%)	70,840	(7%)	1,011,251
Unit 2 (Appendix C-2)	913,798	(91%)	22,495	(2%)	69,155	(7%)	1,005,448
Unit 3 (Appendix C-3)	914,246	(91%)	19,006	(2%)	70,855	(7%)	1,004,106
Independent Spent Fuel Storage Facility (Appendix L)	-	(0%)	506,724	(100%)	-	(0%)	506,724
ISFSI Campaign Costs (Appendix N)	-	(0%)	16,750	(100%)	-	(0%)	16,750
Stored Steam Generators and Storage Facility (Appendix G)	87,513	(99%)	-	(0%)	672	(1%)	88,185
Water Reclamation Facility (Appendix H)	-	(0%)	-	(0%)	12,988	(100%)	12,988
Water Reclamation Supply System Pipeline & Structures (Appendix I)	-	(0%)	-	(0%)	75,452	(100%)	75,452
Evaporation Ponds (Appendix J)	-	(0%)	-	(0%)	77,061	(100%)	77,061
Make-up Water Reservoirs (Appendix K)	-	(0%)	-	(0%)	6,259	(100%)	6,259
Stored Reactor Closure Heads & Storage Facility (Appendix M)	9,765	(99%)	-	(0%)	132	(1%)	9,898
Station Total	**2,841,199**	(75%)	**589,509**	(15%)	**383,415**	(10%)	**3,814,123**

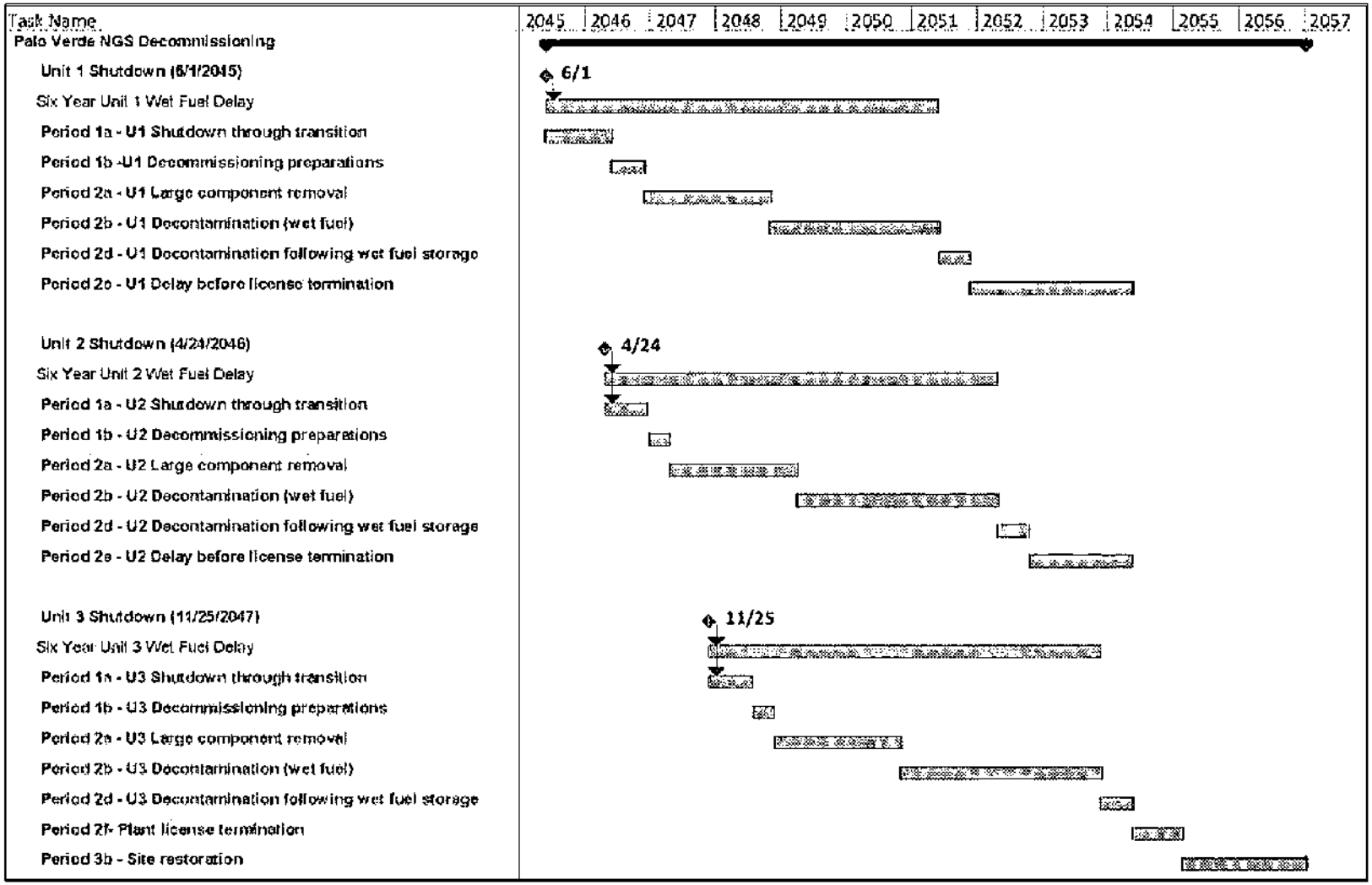
[1] Columns may not add due to rounding

2019 vs. 2023 DECOMMISSIONING COST ESTIMATE COMPARISON

	2019 Study Cost, 2019$ (thousands)	2019 Study Cost, 2023$ (thousands)	2023 Study Cost, 2023$ (thousands)	Change '19 -'23 (thousands)	% chg.
Unit 1 (Appendix C-1)					
Pre-shutdown	12,943	15,049	2,424	-12,624	-84%
Preparations	189,566	220,403	210,969	-9,434	-4%
Decommissioning	573,445	666,728	708,383	41,655	6%
Site Restoration	77,429	90,024	89,474	-550	-1%
Subtotal [1]	853,384	992,204	1,011,251	19,046	2%
Unit 2 (Appendix C-2)					
Pre-shutdown	n/a	n/a	2,424	2,424	100%
Preparations	140,454	163,301	150,106	-13,195	-8%
Decommissioning	617,636	718,107	763,527	45,419	6%
Site Restoration	77,233	89,797	89,391	-406	0%
Subtotal [1]	835,323	971,205	1,005,448	34,243	4%
Unit 3 (Appendix C-3)					
Pre-shutdown	n/a	n/a	2,424	2,424	100%
Preparations	140,271	163,089	150,106	-12,983	-8%
Decommissioning	667,827	776,463	762,008	-14,454	-2%
Site Restoration	116,181	135,081	89,568	-45,513	-34%
Subtotal [1]	924,279	1,074,632	1,004,106	-70,526	-6.6%
Subtotal Units 1, 2, & 3	2,612,986	3,038,042	3,020,805	-17,237	-1%
Independent Spent Fuel Storage Installation (Appendix L)	145,994	169,743	506,724	336,981	199%
ISFSI Campaign Costs (Appendix N)	n/a	n/a	16,750	16,750	100%
Other Facilities					
Stored Steam Generators and Storage Facility (Appendix G)	57,074	66,359	88,185	21,826	33%
Water Reclamation Facility (Appendix H)	11,027	12,821	12,988	168	1%
Water Reclamation Supply System Pipeline & Structures (Appendix I)	54,024	62,812	75,452	12,640	20%
Evaporation Ponds (Appendix J)	66,009	76,746	77,061	315	0%
Make-up Water Reservoirs (Appendix K)	5,069	5,893	6,259	366	6%
Stored Reactor Closure Heads & Storage Facility (Appendix M)	5,405	6,284	9,898	3,614	58%
Subtotal [1]	198,607	230,914	269,843	38,929	17%
Station Total [1]	**2,957,587**	**3,438,700**	**3,814,123**	375,423	11%

[1] *Columns may not add due to rounding*

SUMMARY LEVEL MILESTONE SCHEDULE



Note: Removal of the Water Reclamation Facility, Water Reclamation Supply System Pipeline & Structures, and Make-Up Water Reservoirs can begin after spent nuclear fuel is placed in dry storage or transferred to the DOE. Evaporation Ponds, Retired Steam Generators & Storage Facility, and the Stored Reactor Closure Heads & Storage Facility can begin any time after Unit 3 shutdown and must be completed by the end of the site license termination period for the nuclear units.

1. INTRODUCTION

This report presents estimates of the cost to decommission the Palo Verde Nuclear Generating Station (Palo Verde), for the DECON scenario described in Section 2, following a scheduled and permanent cessation of plant operations. The analysis is designed to provide the OA with sufficient information to assess its financial obligations as they pertain to the eventual decommissioning of the nuclear station. It is not a detailed engineering document, but a financial analysis prepared in advance of the detailed engineering that will be required to carry out the decommissioning.

This study incorporates two decommissioning cost reduction alternatives. These alternatives were initially evaluated as part of the 1998 decommissioning cost study, and they have been included in subsequent studies up to and including the 2023 Decommissioning Cost Estimate (DCE). Appendix A is an excerpt from the 1998 study summarizing these alternatives. Two alternatives were approved by the OA for use in conjunction with the 1998 study: On-site disposal of clean fill, and OA to act as Decommissioning Operations Contractor (DOC). As DOC, the OA will provide contract management of the decommissioning labor force, including subcontractors, as well as direct all decontamination and dismantling activities.

Isolation of the spent fuel pool was also first incorporated into the 1998 base estimate and has been retained in the subsequent studies. Section 2.2 contains a further description of this activity. A complete discussion of the assumptions used in this estimate is presented in Section 3.

1.1 OBJECTIVES OF STUDY

The objective of this study is to prepare an estimate of the cost, schedule, and waste volume generated to decommission Palo Verde, including all common and supporting facilities. The study considered the integration of the three-unit dismantling, and the dismantling of the Water Reclamation Facility, the Water Reclamation Supply System Pipeline & Structures, the Evaporation Ponds, the Make-up Water Reservoirs, the Independent Spent Fuel Storage Installation (ISFSI), the Stored Steam Generators and Storage Facility, and the Stored Reactor Closure Heads & Storage Facility. The site Transmission and Distribution System will remain in place and is not considered part of this decommissioning estimate.

Although essentially identical, the three units on the Palo Verde site were designed and constructed using the "slide along" concept, i.e., the second and third units followed along as the design of the first unit was finalized. The

interconnection between the units was minimal since they were not built simultaneously. This schedule resulted in a differential in the start dates of commercial power operation, i.e., Unit No. 3 began commercial operation approximately two years after Unit No. 1. This differential is reflected in the dates for final shutdown and, correspondingly, the initiation of decommissioning activities. Since there are advantages to sequential decommissioning (e.g., a learning curve may increase the overall program efficiency), the offset in shutdown dates was retained in the decommissioning schedule. Consequently, the decommissioning sequence for the three units made use of this offset in integrating the dismantling program for the entire station.

Operating licenses were issued on December 31, 1984 for Unit 1; December 9, 1985 for Unit 2; and March 25, 1987 for Unit 3[1]*. Based upon the license renewal for all the units in 2011, the shutdown dates are June 1, 2045 for Unit 1; April 24, 2046 for Unit 2; and November 25, 2047 for Unit 3. These dates were used as an input to scheduling the decommissioning activities.

1.2 SITE DESCRIPTION

Palo Verde is located approximately 34 miles west of the nearest boundary of the city of Phoenix, in Maricopa County, Arizona. The three Nuclear Steam Supply Systems (NSSS) are standardized designs marketed by ABB/Combustion Engineering as "System 80s." A stretch power program to increase output has been implemented on all three units.

The NSSS of each unit consists of a pressurized water reactor with two independent primary coolant loops, each of which has two reactor coolant pumps and a steam generator. An electrically heated pressurizer and connecting piping complete the system. These systems are housed within seismic Category I reinforced concrete dry structures. Each such containment is a steel-lined, pre-stressed concrete cylinder with a hemispherical dome and a flat, reinforced concrete foundation mat. A welded stainless steel liner plate, anchored to the inside face of the containment, serves as a leak-tight membrane.

Heat produced in each reactor is converted to electrical energy by a Main Steam Supply System. A turbine-generator system converts the thermal energy of steam produced in the steam generators into mechanical shaft power and then into electrical energy. The turbine-generators are each tandem compound, four-element units. They consist of one high-pressure double-flow and three low-pressure double-flow elements driving a direct-coupled generator at 1800 rpm.

* Annotated references for citations in Sections 1-6 are provided in Section 7.

The turbines are operated in a closed feedwater cycle that condenses the steam; the heated feedwater is returned to the steam generators. Heat rejected in the main condensers is removed by the Circulating Water System (CWS).

The CWS provides the heat sink required for removal of waste heat in the thermal cycle. The system has the principal function of removing heat by absorbing this energy in the main condenser. The circulating water pumps take suction from the intake structure and pump the circulating water through the main condensers. The cooling water is returned from the main condensers to the cooling towers.

1.3 REGULATORY GUIDANCE

The Nuclear Regulatory Commission (NRC or Commission) provided initial decommissioning requirements in its rule "General Requirements for Decommissioning Nuclear Facilities," issued in June 1988[2]. This rule set forth financial criteria for decommissioning licensed nuclear power facilities. The regulation addressed decommissioning planning needs, timing, funding methods, and environmental review requirements. The intent of the rule was to ensure that decommissioning would be accomplished in a safe and timely manner and that adequate funds would be available for this purpose. Subsequent to the rule, the NRC issued Regulatory Guide 1.159, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors," [3] which provided additional guidance to the licensees of nuclear facilities on the financial methods acceptable to the NRC staff for complying with the requirements of the rule. The regulatory guide addressed the funding requirements and provided guidance on the content and form of the financial assurance mechanisms indicated in the rule.

The rule defined three decommissioning alternatives as being acceptable to the NRC: DECON, SAFSTOR, and ENTOMB. The DECON alternative, the option evaluated for this analysis, assumes that any contaminated or activated portion of the plant's systems, structures, and facilities are removed or decontaminated to levels that permit the site to be released for unrestricted use shortly after the cessation of plant operations.

The rule also placed limits on the time allowed to complete the decommissioning process. For SAFSTOR, the process is restricted in overall duration to 60 years, unless it can be shown that a longer duration is necessary to protect public health and safety. The guidelines for ENTOMB are similar, providing the NRC with both sufficient leverage and flexibility to ensure that these deferred options are only used in situations where it is reasonable and

consistent with the definition of decommissioning. At the conclusion of a 60-year dormancy period (or longer for ENTOMB if the NRC approves such a case), the site would still require significant remediation to meet the unrestricted release limits for license termination.

The 60-year restriction has limited the practicality for the ENTOMB alternative at commercial reactors that generate significant amounts of long-lived radioactive material. In 2017, the NRC's staff issued the regulatory basis for proposed new regulations on the decommissioning of commercial nuclear power reactors. In the regulatory basis, the NRC staff proposed removing any discussion of the ENTOMB option from existing guidance documents "since the method is not deemed practically feasible for current U.S. power reactors, and the timeframe for decommissioning completion using the ENTOMB method is generally inconsistent with current regulations."[4]

In 1996, the NRC published revisions to the general requirements for decommissioning nuclear power plants.[5] When the regulations were originally adopted in 1988, it was assumed that the majority of licensees would decommission at the end of the facility's operating licensed life. Since that time, several licensees permanently and prematurely ceased operations. Exemptions from certain operating requirements were required once the reactor was defueled to facilitate the decommissioning. Each case was handled individually, without clearly defined generic requirements. The NRC amended the decommissioning regulations in 1996 to clarify ambiguities and codify procedures and terminology as a means of enhancing efficiency and uniformity in the decommissioning process. The new amendments allow for greater public participation and better define the transition process from operations to decommissioning.

Under the revised regulations, licensees will submit written certification to the NRC within 30 days after the decision to cease operations. Certification will also be required once the fuel is permanently removed from the reactor vessel. Submittal of these notices will entitle the licensee to a fee reduction and eliminate the obligation to follow certain requirements needed only during operation of the reactor. Within two years of submitting a notice of permanent cessation of operations, the licensee is required to submit a Post-Shutdown Decommissioning Activities Report (PSDAR) to the NRC. The PSDAR describes the planned decommissioning activities, the associated sequence and schedule, and an estimate of expected costs. Prior to completing decommissioning, the licensee is required to submit an application to the NRC to terminate the license, which will include a License Termination Plan (LTP).

In 2011, the NRC published amended regulations to improve decommissioning planning and thereby reduce the likelihood that any current operating facility will become a legacy site.[6] The amended regulations require licensees to conduct their operations to minimize the introduction of residual radioactivity into the site, which includes the site's subsurface soil and groundwater. Licensees also may be required to perform site surveys to determine whether residual radioactivity is present in subsurface areas and to keep records of these surveys with records important for decommissioning. The amended regulations require licensees to report additional details in their DCE as well as requiring additional financial reporting and assurances. These additional details, including an ISFSI decommissioning estimate, are included in this analysis.

1.3.1 High-Level Radioactive Waste Management

Congress passed the "Nuclear Waste Policy Act" [7] (NWPA) in 1982, assigning the federal government's long-standing responsibility for disposal of the spent nuclear fuel created by the commercial nuclear generating plants to the DOE. It was to begin accepting spent fuel by January 31, 1998; however, to date no progress in the removal of spent fuel from commercial generating sites has been made.

Today, the country is at an impasse on high-level waste disposal, even with the License Application for a geologic repository submitted by the DOE to the NRC in 2008. The Obama Administration cut the budget for the repository program while promising to "conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle ... and make recommendations for a new plan." Towards this goal, the Obama administration appointed a Blue Ribbon Commission on America's Nuclear Future (Blue Ribbon Commission) to make recommendations for a new plan for nuclear waste disposal. The Blue Ribbon Commission's charter includes a requirement that it consider "[o]ptions for safe storage of used nuclear fuel while final disposition pathways are selected and deployed."[8]

On January 26, 2012, the Blue Ribbon Commission issued its "Report to the Secretary of Energy" containing several recommendations on nuclear waste disposal. Two of the recommendations that may impact decommissioning planning are:

- "[T]he United States [should] establish a program that leads to the timely development of one or more consolidated storage facilities"

- "[T]he United States should undertake an integrated nuclear waste management program that leads to the timely development of one or more permanent deep geological facilities for the safe disposal of spent fuel and high-level nuclear waste"[9]

In January 2013, the DOE issued the "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste," in response to the recommendations made by the Blue Ribbon Commission and as "a framework for moving toward a sustainable program to deploy an integrated system capable of transporting, storing, and disposing of used nuclear fuel."[10]

"With the appropriate authorizations from Congress, the Administration currently plans to implement a program over the next 10 years that:

- Sites, designs and licenses, constructs, and begins operations of a pilot interim storage facility by 2021 with an initial focus on accepting used nuclear fuel from shut-down reactor sites;
- Advances toward the siting and licensing of a larger interim storage facility to be available by 2025 that will have sufficient capacity to provide flexibility in the waste management system and allows for acceptance of enough used nuclear fuel to reduce expected government liabilities; and
- Makes demonstrable progress on the siting and characterization of repository sites to facilitate the availability of a geologic repository by 2048."

The NRC's review of DOE's license application to construct a geologic repository at Yucca Mountain was suspended in 2011 when the Obama administration significantly reduced the budget for completing that work. However, the US Court of Appeals for the District of Columbia Circuit issued a writ of mandamus (in August 2013)[11] ordering NRC to comply with federal law and resume its review of DOE's Yucca Mountain repository license application to the extent of previously appropriated funding for the review. That review is now complete with the publication of the five-volume safety evaluation report. A supplement to DOE's environmental impact statement and an adjudicatory hearing on the contentions filed by interested parties must be completed before a licensing decision can be made. Although the DOE proposed it would start fuel acceptance in 2025, no progress has been made in the repository program since DOE's 2013 strategy was issued except for the

completion of the Yucca Mountain safety evaluation report

Holtec International submitted a license application to the NRC on March 30, 2017 for a consolidated interim spent fuel storage facility in southeast New Mexico called HI-STORE CIS (Consolidated Interim Storage) under the provisions of 10 CFR Part 72. The application is currently under NRC review.

Waste Control Specialists submitted an application to the NRC on April 28, 2016, to construct and operate a Consolidated Interim Storage Facility (CISF) at its West Texas facility. On April 18, 2017, WCS requested that the NRC temporarily suspend all safety and environmental review activities, as well as public participation activities associated with WCS's license application. In March 2018, WCS and Orano USA, announced their intent to form a joint venture to license the facility. The joint venture, named Interim Storage Partners (ISP), requested that the NRC resume its review of the original CISF license application. Subsequently, in September 2021, NRC issued a license to ISP for its WCS CISF to construct and operate the facility for spent nuclear fuel and GTCC storage. However, the facility is not yet operational.

Completion of the decommissioning process is dependent upon the DOE's ability to remove spent fuel from the site in a timely manner. DOE's repository program had originally assumed that spent fuel allocations would be accepted for disposal from the nation's commercial nuclear plants, with limited exceptions, in the order (the "queue") in which it was discharged from the reactor. However, the Blue Ribbon Commission, in its final report, noted that: "[A]ccepting spent fuel according to the OFF [Oldest Fuel First] priority ranking instead of giving priority to shutdown reactor sites could greatly reduce the cost savings that could be achieved through consolidated storage if priority could be given to accepting spent fuel from shutdown reactor sites before accepting fuel from still-operating plants. .... The magnitude of the cost savings that could be achieved by giving priority to shutdown sites appears to be large enough (i.e., in the billions of dollars) to warrant DOE exercising its right under the Standard Contract to move this fuel first." [12]

This estimate assumes, based upon the oldest fuel receiving the highest priority and an annual maximum rate of transfer of 3,000 metric tons of uranium, DOE would commence pickup of spent fuel from commercial

generators no later than 2034, with fuel completely removed from the site by 2097. For the first 19 years of this period (2034-2052), the annual fuel pickup rate is aligned with DOE/RW-0567, Acceptance Priority Ranking and Annual Capacity Report [39]. Beginning in year 20 (2053) and continuing until 2097, the annual fuel pickup rate is based on a schedule provided by the OA.

The NRC requires that licensees establish a program to manage and provide funding for the caretaking of all irradiated fuel at the reactor site until title of the fuel is transferred to the DOE.[13] Interim storage of the fuel, until the DOE has completed the transfer, will be at an on-site ISFSI.

An ISFSI, operated under a 10 CFR Part 50 General License (in accordance with 10 CFR 72, Subpart K [14]), has been constructed to support continued plant operations. The facility is assumed to be available to support future decommissioning operations. As such, following the final cessation of plant operations, the fuel from the wet storage pools, including the final cores, is either transferred to the DOE or packaged for interim storage at the ISFSI (depending upon the shutdown date assumed). Once the fuel handling building wet storage pools are emptied, the buildings can be either decontaminated and dismantled or prepared for long-term storage.

For cost estimating purposes, the spent fuel storage scenario developed by the OA assumes that the existing ISFSI facility will be available to support decommissioning operations. The current OA spent fuel storage plan projects that spent fuel will be in dry storage at Palo Verde through the year 2097. All costs to operate and maintain the ISFSI along with the costs for transfer of the fuel from the spent fuel pool to the ISFSI and the DOE, and from the ISFSI to the DOE are shown in Appendix L. Also included in this appendix are the purchase costs for the canisters and overpacks required to store the fuel transferred from the pool to the ISFSI post-shutdown. A separate appendix, Appendix N, is included to show one-time costs associated with ISFSI operations (cask handling equipment, instrumentation, crane relocation, and ISFSI shield wall costs).

DOE has breached its obligations to remove fuel from reactor sites and has also failed to provide the plant owners with information about how it will ultimately perform. DOE officials have stated that DOE does not have an obligation to accept already-canistered fuel without an amendment to DOE's contracts with plant licensees to remove the fuel

(the "Standard Contract"), but DOE has not explained what any such amendment would involve. Consequently, the OA has no information or expectations on how DOE will remove fuel from the site in the future. In the absence of information about how DOE will perform, and for purposes of this analysis only, it is assumed that DOE will accept already-canistered fuel. If this assumption is incorrect, it is assumed that DOE will have liability for costs incurred to transfer the fuel to DOE-supplied containers.

1.3.2 Low-Level Radioactive Waste Management

The contaminated and activated material generated in the decontamination and dismantling of a commercial nuclear reactor is classified as low-level (radioactive) waste, although not all of the material is suitable for "shallow-land" disposal. With the passage of the "Low-Level Radioactive Waste Policy Act" in 1980, [15] and its Amendments of 1985, [16] the states became ultimately responsible for the disposition of low-level radioactive waste generated within their own borders.

Arizona is a member of the Southwest Compact, which currently does not have an operational disposal site. For the purposes of the decommissioning estimate, the existing waste disposal options available for the Palo Verde site are used for this estimate.

Except for Texas, no new compact facilities have been successfully sited, licensed, and constructed. The Texas Compact disposal facility is now operational, and waste is being accepted from generators within the Compact by the operator, Waste Control Specialists (WCS).

Disposition of the various waste streams produced by the decommissioning process considered all options and services currently available to Palo Verde. The majority of the low-level radioactive waste designated for direct disposal (Class A[17] containerized) is sent to WCS. Therefore, disposal costs for Class A waste were based on Palo Verde's STARS Alliance Agreement with WCS. Class A bulk waste is sent to the *EnergySolutions* facility in Clive Utah. These disposal costs are based on Palo Verde's STARS Alliance Agreement with Energy*Solutions*.

The WCS facility can also receive the Class B and C waste. As such, for this analysis, Class B and C waste is shipped to the WCS facility. Disposal costs for the waste are based on current rates paid by Palo

Verde. Large components (Pressurizer, Steam Generators, and Reactor Coolant Pumps) are sent to WCS. Disposal costs for large components are based on NUREG-1307 [38] per-component costs for disposal at WCS. Resin and filter package Class A waste is sent to the *EnergySolutions* facility in Clive Utah.

The dismantling of the components residing closest to the reactor core generates radioactive waste that may be considered unsuitable for shallow-land disposal (i.e., low-level radioactive waste with concentrations of radionuclides that exceed the limits established by the NRC for Class C radioactive waste (Greater-than Class C or GTCC)). The Low-Level Radioactive Waste Policy Amendments Act of 1985 assigned the federal government the responsibility for the disposal of this material. The Act also stated that the beneficiaries of the activities resulting in the generation of such radioactive waste bear all reasonable costs of disposing of such waste. However, to date, the federal government has not identified a cost, if any, for GTCC disposal or a schedule for acceptance.

For purposes of this analysis, the GTCC radioactive waste is assumed to be packaged and disposed of in a manner similar to high-level waste and at a cost equivalent to that envisioned for the spent fuel. The GTCC is packaged in the same canisters used for spent fuel and is assumed to be stored on site in the ISFSI and shipped to the DOE following completion of all spent fuel shipments.

1.3.3 Radiological Criteria for License Termination

In 1997, the NRC published Subpart E, "Radiological Criteria for License Termination [18] amending 10 CFR Part 20. This subpart provides radiological criteria for releasing a facility for unrestricted use. The regulation states that the site can be released for unrestricted use if radioactivity levels are such that the average member of a critical group would not receive a Total Effective Dose Equivalent (TEDE) in excess of 25 millirem per year and provided that residual radioactivity has been reduced to levels that are As Low As Reasonably Achievable (ALARA). The decommissioning estimates for Palo Verde assume that the site will be remediated to a residual level consistent with the NRC-prescribed level for radioactive material.

It should be noted that the NRC and the Environmental Protection Agency (EPA) differ on the amount of residual radioactivity considered