Part 3

230940070

Appendix 4A: Total (DOM LSE) Sales (GWh) by Customer Class

Year	Residential	Commercial	Industrial	Public Authority	Street and Traffic Lighting	Sales for Resale	Total
2011	30,779	28,957	7,960	10,555	273	1,921	80,445
2012	29,174	28,927	7,849	10,496	277	2,011	78,735
2013	30,184	29,372	8,097	10,261	276	1,984	80,174
2014	31,290	29,964	8,812	10,402	261	1,956	82,685
2015	30,923	30,282	8,765	10,159	275	1,981	82,385
2016	28,213	31,366	8,715	10,161	253	1,856	80,564
2017	29,737	32,292	8,638	10,555	258	1,609	83,088
2018	32,139	33,591	8,324	10,761	260	1,607	86,681
2019	31,439	35,296	7,302	10,645	263	1,580	86,524
2020	32,670	32,911	6,503	11,073	261	1,439	84,856
2021	31,598	35,203	6,716	10,740	245	1,570	86,071
2022	31,114	39,518	6,399	11,018	232	1,543	89,823
2023	31,436	43,633	6,758	10,406	246	1,608	94,086
2024	31,313	47,125	6,785	10,438	247	1,607	97,516
2025	30,998	48,387	6,770	10,392	246	1,595	98,388
2026	31,238	53,683	6,757	10,374	246	1,593	103,891
2027	31,502	56,355	6,729	10,355	246	1,589	106,777
2028	31,969	59,503	6,700	10,366	247	1,595	110,380
2029	32,369	62,569	6,635	10,322	246	1,584	113,725
2030	32,995	66,583	6,577	10,314	246	1,581	118,296
2031	33,686	70,934	6,510	10,312	246	1,579	123,267
2032	34,608	76,496	6,461	10,341	247	1,587	129,741
2033	35,211	81,895	6,377	10,311	246	1,578	135,618
2034	35,984	88,330	6,311	10,311	246	1,578	142,759
2035	36,776	95,352	6,245	10,310	246	1,580	150,510
2036	37,702	103,107	6,198	10,339	247	1,593	159,187
2037	38,207	110,753	6,116	10,309	246	1,589	167,220
2038	38,844	119,535	6,053	10,309	246	1,594	176,581

Note: Historic (2011 - 2022); Projected (2023 - 2038)

Appendix 4A has been provided with the 2023 Company Load Forecast instead of the 2023 PJM Load Forecast because PJM does not provide forecasted sales or customer counts broken down by rate class.

Appendix 4B: Virginia Sales (GWh) by Customer Class

Year	Residential	Commercial	Industrial	Public Authority	Street and Traffic Lighting	Sales for Resale	Total
2011	29,153	28,163	6,342	10,423	265	1,870	76,216
2012	27,672	28,063	6,235	10,370	269	1,958	74,568
2013	28,618	28,487	6,393	10,134	267	1,934	75,833
2014	29,645	29,130	6,954	10,272	253	1,906	78,160
2015	29,293	29,432	7,006	10,029	266	1,930	77,956
2016	26,652	30,537	6,947	10,033	245	1,803	76,217
2017	28,194	31,471	6,893	10,429	250	1,556	78,794
2018	30,437	32,752	6,598	10,633	252	1,555	82,228
2019	29,829	34,472	5,591	10,517	254	1,530	82,194
2020	30,969	32,159	4,872	10,924	253	1,393	80,570
2021	29,968	34,464	4,980	10,590	238	1,519	81,759
2022	29,474	38,750	4,888	10,868	225	1,496	85,701
2023	29,782	42,867	5,344	10,255	239	1,558	90,046
2024	29,672	46,372	5,315	10,285	240	1,558	93,442
2025	29,358	47,640	5,232	10,243	239	1,546	94,257
2026	29,598	52,942	5,318	10,219	239	1,544	99,860
2027	29,861	55,618	5,413	10,198	239	1,541	102,870
2028	30,324	58,763	5,060	10,209	240	1,546	106,142
2029	30,719	61,822	5,097	10,165	239	1,535	109,577
2030	31,338	65,827	4,914	10,156	239	1,532	114,007
2031	32,021	70,170	4,977	10,154	239	1,531	119,092
2032	32,936	75,723	4,944	10,184	240	1,538	125,565
2033	33,529	81,112	4,879	10,153	239	1,529	131,441
2034	34,290	87,534	4,779	10,152	239	1,530	138,525
2035	35,069	94,542	4,887	10,151	239	1,532	146,421
2036	35,983	102,282	4,501	10,181	240	1,544	154,730
2037	36,477	109,910	4,451	10,150	239	1,540	162,768
2038	37,103	118,673	4,555	10,149	239	1,546	172,265

Note: Historic (2011 - 2022); Projected (2023 - 2038)

Appendix 4B has been provided with the 2023 Company Load Forecast instead of the 2023 PJM Load Forecast because PJM does not provide forecasted sales or customer counts broken down by rate class.

Appendix 4C: North Carolina Sales (GWh) by Customer Class

Year	Residential	Commercial	Industrial	Public Authority	Street and Traffic Lighting	Sales for Resale	Total
2011	1,626	795	1,618	132	8	51	4,230
2012	1,502	864	1,614	126	8	53	4,167
2013	1,567	885	1,704	127	8	50	4,341
2014	1,645	834	1,858	130	8	50	4,525
2015	1,630	850	1,759	130	8	51	4,428
2016	1,562	829	1,768	128	8	53	4,347
2017	1,542	821	1,744	126	8	53	4,294
2018	1,701	839	1,725	128	8	52	4,453
2019	1,610	824	1,710	127	9	50	4,331
2020	1,701	751	1,630	149	8	46	4,286
2021	1,629	740	1,736	149	7	50	4,312
2022	1,640	768	1,511	150	7	47	4,122
2023	1,653	766	1,414	151	7	49	4,040
2024	1,640	754	1,470	152	7	49	4,074
2025	1,640	747	1,539	149	7	49	4,131
2026	1,639	741	1,439	155	7	49	4,031
2027	1,641	738	1,316	157	7	49	3,907
2028	1,645	740	1,640	157	7	49	4,238
2029	1,650	747	1,537	157	7	49	4,148
2030	1,657	755	1,664	158	7	48	4,289
2031	1,664	764	1,533	158	7	48	4,175
2032	1,673	773	1,516	158	7	49	4,176
2033	1,682	783	1,498	158	7	48	4,176
2034	1,693	795	1,531	158	7	48	4,234
2035	1,707	810	1,358	158	7	48	4,089
2036	1,720	825	1,696	159	7	49	4,456
2037	1,731	842	1,665	159	7	49	4,453
2038	1,741	861	1,499	159	7	49	4,317

Note: Historic (2011 - 2022); Projected (2023 - 2038)
Appendix 4C has been provided with the 2023 Company Load Forecast instead of the 2023 PJM Load Forecast because PJM does not provide forecasted sales or customer counts broken down by rate class.

Appendix 4D: Total (DOM LSE) Customer Count

Year	Residential	Commercial	Industrial	Public Authority	Street and Traffic Lighting	Sales for Resale	Total
2011	2,171,795	233,760	535	29,104	3,031	5	2,438,229
2012	2,187,670	234,947	514	29,114	3,246	4	2,455,496
2013	2,206,657	236,596	526	28,847	3,508	3	2,476,138
2014	2,229,639	237,757	631	28,818	3,653	3	2,500,500
2015	2,252,438	239,623	662	28,923	3,814	3	2,525,463
2016	2,275,551	240,804	654	29,069	3,941	3	2,550,022
2017	2,298,894	242,091	648	28,897	4,149	3	2,574,683
2018	2,323,662	243,701	644	28,716	4,398	3	2,601,124
2019	2,362,949	246,043	634	28,452	4,792	3	2,642,873
2020	2,397,544	246,865	626	29,883	4,889	3	2,679,810
2021	2,427,368	249,622	615	29,845	5,109	3	2,712,562
2022	2,451,831	251,673	610	29,709	5,196	3	2,739,022
2023	2,468,022	252,745	608	29,687	5,286	3	2,756,350
2024	2,499,287	255,100	602	29,757	5,430	3	2,790,179
2025	2,531,721	257,525	596	29,828	5,574	3	2,825,247
2026	2,564,595	259,976	590	29,893	5,718	3	2,860,774
2027	2,597,827	262,447	584	29,954	5,862	3	2,896,675
2028	2,631,236	264,928	578	30,009	6,006	3	2,932,761
2029	2,664,561	267,406	572	30,060	6,150	3	2,968,751
2030	2,697,472	269,860	566	30,106	6,294	3	3,004,300
2031	2,729,661	272,273	560	30,145	6,438	3	3,039,079
2032	2,760,879	274,630	554	30,177	6,582	3	3,072,825
2033	2,790,937	276,922	548	30,202	6,726	3	3,105,337
2034	2,819,694	279,139	542	30,221	6,870	3	3,136,468
2035	2,847,084	281,277	536	30,233	7,014	3	3,166,147
2036	2,873,169	283,340	530	30,240	7,158	3	3,194,439
2037	2,898,044	285,334	524	30,241	7,302	3	3,221,447
2038	2,921,784	287,262	518	30,238	7,446	3	3,247,250

Note: Historic (2011 - 2022); Projected (2023 - 2038)

Appendix 4D has been provided with the 2023 Company Load Forecast instead of the 2023 PJM Load Forecast because PJM does not provide forecasted sales or customer counts broken down by rate class.

Appendix 4E: Virginia Customer Count

Year	Residential	Commercial	Industrial	Public Authority	Street and Traffic Lighting	Sales for Resale	Total
2011	2,070,786	218,341	482	27,252	2,639	3	2,319,503
2012	2,086,647	219,447	464	27,265	2,856	2	2,336,680
2013	2,105,500	221,039	477	26,996	3,118	2	2,357,131
2014	2,128,313	222,143	579	26,966	3,267	2	2,381,269
2015	2,150,818	223,946	611	27,070	3,430	2	2,405,877
2016	2,173,472	225,029	603	27,223	3,560	2	2,429,889
2017	2,196,466	226,270	596	27,041	3,768	2	2,454,143
2018	2,220,797	227,757	594	26,872	4,017	2	2,480,039
2019	2,259,491	229,988	584	26,614	4,417	2	2,521,096
2020	2,292,457	230,782	576	27,901	4,516	2	2,556,234
2021	2,321,357	233,334	567	27,836	4,741	2	2,587,837
2022	2,344,903	235,269	563	27,704	4,824	2	2,613,265
2023	2,360,423	236,236	561	27,705	4,920	2	2,629,846
2024	2,390,543	238,431	555	27,767	5,066	2	2,662,364
2025	2,421,791	240,692	549	27,830	5,212	2	2,696,076
2026	2,453,461	242,976	543	27,888	5,359	2	2,730,228
2027	2,485,477	245,280	537	27,941	5,505	2	2,764,742
2028	2,517,663	247,594	531	27,991	5,652	2	2,799,432
2029	2,549,768	249,903	525	28,036	5,798	2	2,834,031
2030	2,581,475	252,191	519	28,076	5,945	2	2,868,207
2031	2,612,486	254,440	513	28,110	6,091	2	2,901,642
2032	2,642,561	256,638	507	28,139	6,237	2	2,934,084
2033	2,671,518	258,774	501	28,162	6,384	2	2,965,341
2034	2,699,223	260,841	495	28,178	6,530	2	2,995,269
2035	2,725,611	262,834	489	28,189	6,677	2	3,023,802
2036	2,750,741	264,758	483	28,195	6,823	2	3,051,001
2037	2,774,706	266,616	477	28,196	6,970	2	3,076,966
2038	2,797,577	268,414	471	28,193	7,116	2	3,101,772

Note: Historic (2011 - 2022); Projected (2023 - 2038)
Appendix 4E has been provided with the 2023 Company Load Forecast instead of the 2023 PJM Load Forecast because PJM does not provide forecasted sales or customer counts broken down by rate class.

Appendix 4F: North Carolina Customer Count

Year	Residential	Commercial	Industrial	Public Authority	Street and Traffic Lighting	Sales for Resale	Total
2011	101,009	15,418	53	1,852	392	2	118,726
2012	101,024	15,501	50	1,849	390	2	118,816
2013	101,158	15,557	50	1,851	390	1	119,007
2014	101,326	15,614	52	1,853	386	1	119,231
2015	101,620	15,677	52	1,853	384	1	119,586
2016	102,079	15,775	51	1,846	381	1	120,133
2017	102,429	15,821	52	1,857	381	1	120,541
2018	102,865	15,944	50	1,844	381	1	121,085
2019	103,458	16,055	50	1,838	375	1	121,777
2020	105,087	16,083	50	1,982	373	1	123,576
2021	106,011	16,288	48	2,009	368	1	124,725
2022	106,928	16,404	47	2,005	372	1	125,757
2023	107,599	16,509	47	1,982	366	1	126,505
2024	108,743	16,669	47	1,990	364	1	127,814
2025	109,930	16,833	47	1,998	362	1	129,171
2026	111,134	16,999	47	2,005	359	1	130,545
2027	112,350	17,167	47	2,012	357	1	131,934
2028	113,573	17,335	47	2,019	354	1	133,329
2029	114,793	17,503	47	2,024	352	1	134,720
2030	115,997	17,669	47	2,030	349	1	136,093
2031	117,175	17,832	47	2,034	347	1	137,437
2032	118,318	17,992	47	2,038	345	1	138,741
2033	119,418	18,147	47	2,041	342	1	139,997
2034	120,471	18,298	47	2,043	340	1	141,199
2035	121,473	18,443	47	2,044	337	1	142,345
2036	122,428	18,582	47	2,045	335	1	143,438
2037	123,339	18,717	47	2,045	332	1	144,481
2038	124,207	18,848	47	2,045	330	1	145,478

Note: Historic (2011 - 2022); Projected (2023 - 2038)
Appendix 4F has been provided with the 2023 Company Load Forecast instead of the 2023 PJM Load Forecast because PJM does not provide forecasted sales or customer counts broken down by rate class.

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Appendix 4G: LSE Summer and Winter Peak Demand (MW)

Year	Summer Peak Demand (MW)	Winter Peak Demand (MW)
2011	17,521	15,143
2012	16,787	14,544
2013	16,366	15,106
2014	16,249	16,840
2015	16,502	18,434
2016	16,914	16,173
2017	16,350	16,618
2018	16,528	17,792
2019	16,599	16,842
2020	16,356	14,661
2021	16,462	14,469
2022	17,131	17,813
2023	17,730	17,157
2024	18,010	17,497
2025	18,157	17,554
2026	18,828	18,022
2027	19,173	18,199
2028	19,597	18,467
2029	20,021	19,106
2030	20,650	19,558
2031	21,346	20,001
2032	22,153	20,463
2033	23,019	20,933
2034	23,963	21,747
2035	24,972	22,627
2036	26,111	23,458
2037	27,220	24,162
2038	28,483	24,971

Note: Historic (2011 - 2022); Projected (2023 - 2038)
Appendix 4G has been provided with the 2022 Company Load Forecast instead of the 2022 PJM Load Forecast because PJM does not provide forecasted sales or customer counts broken down by rate class.

Appendix 4H - Projected Summer & Winter Peak Load & Energy Forecast

Company Name: Virginia Electric and Power Company

Schedule 1

1. PEAK LOAD AND ENERGY FORECAST

	(ACTUAL)[1]			(PROJECTED)															
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
1. Utility Peak Load (MW)																			
A. Summer																			
1. Base Forecast (LSE Equivalent)	18,356	18,462	17,131	17,863	18,329	18,619	19,341	19,710	20,105	20,535	21,025	21,539	22,178	22,865	23,688	24,562	25,505	26,507	27,693
2. Energy Efficiency & Demand Response[2][3]	(74)	(331)	(186)	(198)	(398)	(604)	(655)	(701)	(722)	(734)	(735)	(742)	(755)	(783)	(785)	(790)	(778)	(790)	(822)
3. Customer Choice (non data center)[1]	-	-	-	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)
4. Adjusted Load	18,282	18,131	18,945	18,998	17,266	17,348	18,019	18,341	18,715	19,133	19,622	20,129	20,752	21,415	22,235	23,104	24,059	25,050	26,193
5. % Increase in Adjusted Load (from previous year)	(0.01)	(0.01)	0.05	0.00	0.02	0.00	0.04	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05
B. Winter																			
1. Base Forecast (LSE Equivalent)	14,661	14,469	17,813	15,914	16,329	16,588	17,231	17,560	17,911	18,205	18,731	19,189	19,755	20,371	21,104	21,882	22,722	23,615	24,662
2. Energy Efficiency & Demand Response[2][3]	(14)	(331)	(228)	(198)	(398)	(604)	(655)	(701)	(722)	(734)	(735)	(742)	(755)	(783)	(785)	(790)	(778)	(790)	(822)
3. Customer Choice (non data center)[1]	-	-	-	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)	(668)
4. Adjusted Load	14,647	14,138	17,585	15,049	15,266	15,316	15,909	16,191	16,521	16,893	17,328	17,779	18,333	18,920	19,651	20,425	21,276	22,158	23,173
5. % Increase in Adjusted Load (from previous year)	(0.12)	(0.03)	0.24	(0.14)	0.01	0.00	0.04	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05
2. Energy (GWh)																			
A. Base Forecast (LSE Equivalent)	81,440	86,356	91,180	100,304	105,180	107,484	113,569	116,922	120,872	124,267	128,710	133,323	139,397	144,817	151,513	158,875	167,199	174,910	184,358
B. Additional Forecast Future BTM[4]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C. Energy Efficiency & Demand Response[2][3]	(401)	(1,657)	(1,136)	(990)	(1,984)	(2,960)	(3,057)	(3,152)	(3,234)	(3,259)	(3,278)	(3,312)	(3,355)	(3,378)	(3,405)	(3,405)	(3,435)	(3,408)	(3,612)
D. Customer Choice (non data center)[1]	-	-	-	(4,319)	(4,330)	(4,319)	(4,319)	(4,319)	(4,330)	(4,319)	(4,319)	(4,319)	(4,330)	(4,319)	(4,319)	(4,319)	(4,330)	(4,319)	(4,319)
E. Adjusted Energy	81,039	84,729	90,044	94,996	98,866	100,205	106,193	109,451	113,308	116,689	121,115	125,692	131,712	137,118	143,769	151,151	159,434	167,093	176,427
F. % Increase in Adjusted Energy	(0.06)	0.05	0.06	0.05	0.04	0.01	0.06	0.03	0.04	0.03	0.04	0.04	0.05	0.04	0.05	0.05	0.05	0.05	0.06

(1) Actual metered data

(2) Demand response programs are not classified as capacity resources and are included in adjusted load.

(3) 2020 and 2021 actual historical data based upon measured and verified EM&V results . 2022 projected values represent modeled DSM firm capacity.

(4) Future behind-the-meter, which is not included in the base forecast.

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Appendix 4I - Required Reserve Margin (for Plan B)

Company Name: Virginia Electric and Power Company

Schedule 6

POWER SUPPLY DATA (continued)

	(ACTUAL)				(PROJECTED)														
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
I. Reserve Margin[1]																			
1. Summer Reserve Margin																			
a. MW[1]	2,827	3,006	2,348	2,533	2,538	2,550	2,649	2,696	2,751	2,813	2,884	2,959	3,051	3,148	3,269	3,398	3,537	3,682	3,850
b. Percent of Load	17.3%	18.3%	13.7%	14.9%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%
c. Actual Reserve Margin[2]	N/A	N/A	N/A	3.6%	4.9%	5.1%	2.7%	7.3%	10.7%	8.7%	7.3%	5.3%	3.3%	4.5%	3.4%	3.2%	3.8%	3.2%	2.9%
2. Winter Reserve Margin																			
a. MW[1]	N/A	N/A	N/A	4,482	4,538	4,582	4,759	4,847	5,134	5,053	5,178	5,309	5,470	5,643	5,853	6,076	6,319	6,574	6,871
b. Percent of Load	N/A	N/A	N/A	29.8%	29.7%	29.9%	29.9%	29.9%	31.1%	29.9%	29.9%	29.9%	29.8%	29.8%	29.8%	29.7%	29.7%	29.7%	29.7%
c. Actual Reserve Margin[2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
II. Annual Loss-of-Load Hours[3]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(1) To be calculated based on total net capability for summer and winter.

(2) Does not include spot purchases of capacity or energy efficiency programs.

(3) The Company follows PJM reserve requirements which are based on loss of load expectation.

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Appendix 4J – Summer and Winter Peak

Company Name: Virginia Electric and Power Company

POWER SUPPLY DATA

Schedule 5

	(ACTUAL)				(PROJECTED)														
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
II. Load (MW)																			
1. Summer																			
a. Adjusted Summer Peak[1]	16,282	16,131	16,945	16,998	17,266	17,348	18 019	18,341	18,715	19,133	19,622	20,129	20,752	21,415	22,235	23,104	24,059	25,050	26,193
b. Other Commitments[2]	74	331	186	865	1,063	1,272	1 322	1,369	1,390	1,402	1,403	1,410	1,425	1,450	1,453	1,458	1,446	1,457	1,490
c. Total System Summer Peak	16,356	16,462	17,131	17,863	18,329	18,619	19,341	19,710	20,105	20,535	21,025	21,539	22,178	22,865	23,688	24,562	25,505	26,507	27,683
d. Percent Increase in Total Summer Peak	-1.5%	0.6%	4.1%	4.3%	2.6%	1.6%	3.9%	1.9%	2.0%	2.1%	2.4%	2.4%	3.0%	3.1%	3.6%	3.7%	3.8%	3.9%	4.4%
2. Winter																			
a. Adjusted Winter Peak[1]	14,647	14,138	17,585	15,049	15,266	15,316	15,909	16,191	16,521	16,893	17,328	17,779	18,333	18,920	19,651	20,425	21,276	22,158	23,173
b. Other Commitments[2]	14	331	228	865	1,063	1,272	1 322	1,369	1,390	1,402	1,403	1,410	1,425	1,450	1,453	1,458	1,446	1,457	1,490
c. Total System Winter Peak	14,661	14,469	17,813	15,914	16,329	16,588	17,231	17,560	17,911	18,295	18,731	19,189	19,758	20,371	21,104	21,882	22,722	23,615	24,662
d. Percent Increase in Total Winter Peak	-12.9%	-1.3%	23.1%	-10.7%	2.6%	1.6%	3.9%	1.9%	2.0%	2.1%	2.4%	2.4%	3.0%	3.1%	3.6%	3.7%	3.8%	3.9%	4.4%

(1) Adjusted load from Appendix 4H.

(2) Includes firm additional forecast, conservation efficiency, peak adjustments, and customer choice from Appendix 4H.

Appendix 4K – Wholesale Power Sales Contracts

Company Name: Virginia Electric and Power Company **Schedule 20**

WHOLESALE POWER SALES CONTRACTS

Entity	Contract Length	Contract Type	2020	2021 (Actual)[2]	2022
Craig-Botetourt Electric Coop	12-Month Termination Notice	Full Requirements[1]	9	10	13
Town of Windsor, North Carolina	12-Month Termination Notice	Full Requirements[1]	10	10	11
Virginia Municipal Electric Association	5/31/2031 with annual renewal	Full Requirements[1]	283	291	286

(1) Full requirements contracts do not have a specific contracted capacity amount. MWs are included in the Company's load forecast.

(2) Actual customer peak load measures are included.

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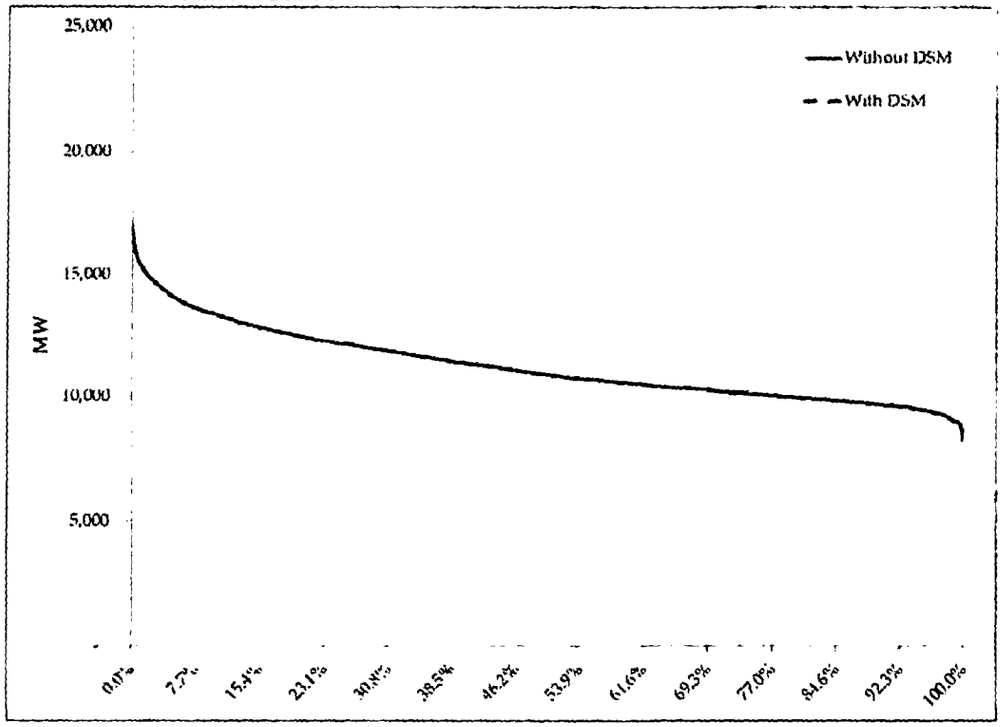
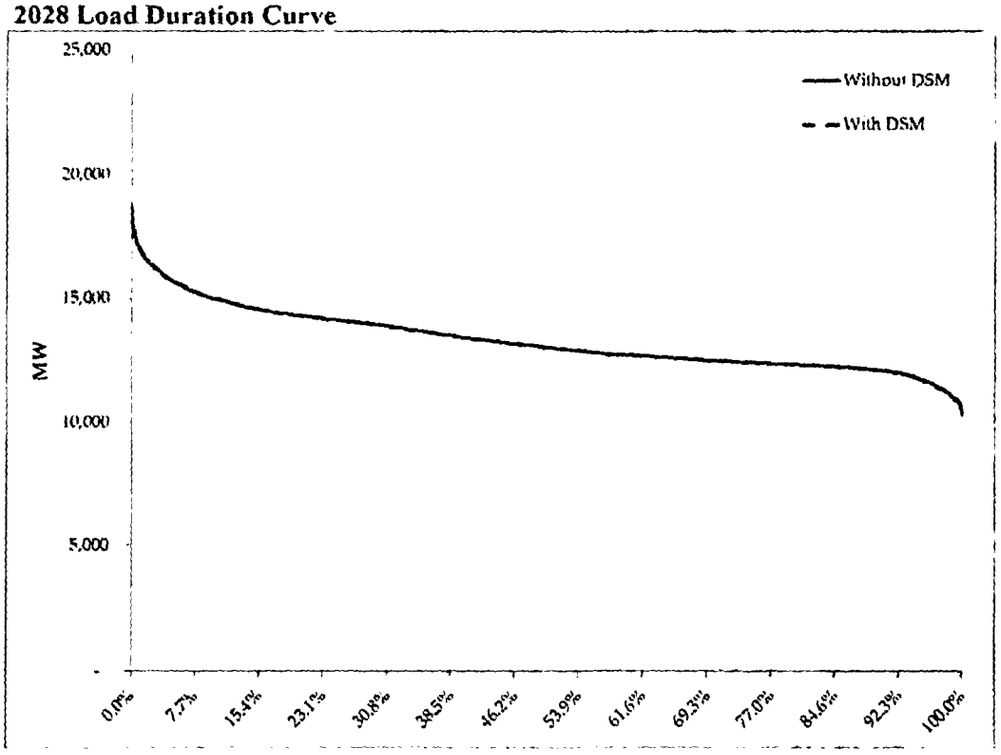
Appendix 4L – Load Duration Curves

2023 Load Duration Curve

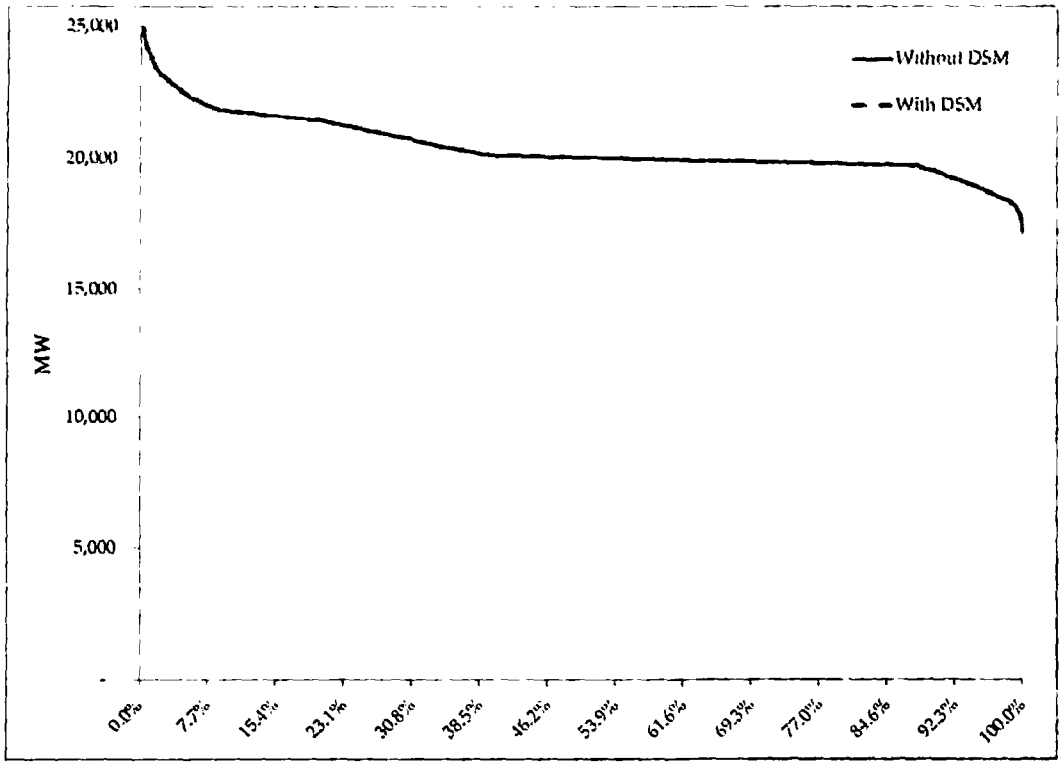


2028 Load Duration Curve



Appendix 4L – Load Duration Curves

2038 Load Duration Curve



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Appendix 4M – Economic Assumptions used in the Sales and Hourly Budget Forecast Model
(Annual Growth Rate)

	Economic Assumptions Used in the Sales and Hourly Budget Forecst Model (Annual Growth Rate)																
Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	CAGR
Population: Total, (Ths.)	8,702	8,745	8,780	8,812	8,844	8,874	8,904	8,934	8,964	8,993	9,020	9,047	9,072	9,097	9,121	9,144	0.3%
Disposable Personal Income: (Mil. 12$; SAAR)	486,652	500,642	513,465	527,700	540,982	553,761	566,552	578,825	590,711	602,661	614,879	627,070	639,215	651,383	663,610	675,672	2.2%
Per Capia Disposable Personal Income: (C 12$; SAAR)	47,978	49,276	50,335	51,484	52,554	53,612	54,677	55,684	56,653	57,627	58,630	59,637	60,643	61,655	62,671	63,677	1.9%
Residential Permits: Total, (#, SAAR)	46.384	49.593	50,348	51,118	51.603	51,656	51,065	49,658	48.128	46,010	43,601	40.963	38.396	36,051	33,832	31.759	-2.5%
Employment: Total Manufacturing, (Ths., SA)	238	240	240	239	238	236	234	232	230	228	226	224	222	221	219	217	-0.6%
Employment: Total Government, (Ths., SA)	722	727	730	734	739	745	750	754	757	759	762	765	767	769	771	774	0.5%
Employment: Military personnel, (Ths., SA)	118	117	117	116	116	116	115	115	114	114	114	113	113	112	112	112	-0.4%
Employment: State and local government, (Ths., SA)	534	539	543	547	552	557	563	566	569	571	574	576	578	580	582	584	0.6%
Employment: Commercial Sector, (Ths., SA)	2,935	2,967	2,997	3,015	3,033	3,053	3,073	3,091	3,108	3,123	3,139	3,155	3,170	3,184	3,197	3,210	0.6%
Gross State Product: Total Manufacturing, (Bil. Ch. 2012 USD, SAAR)	40.7	41.4	42.5	43.5	44.4	45.3	46.0	46.6	47.2	47.8	48.5	49.2	49.9	50.6	51.2	51.9	1.6%
Gross State Product: Total, (Bil. Ch. 2012 USD, SAAR)	513	525	540	556	571	585	599	611	622	634	646	658	670	682	694	706	2.2%
Gross State Product: State and Local Government,(Bil. Chained 2012 $, SA	38.7	39.1	39.9	40.6	41.3	41.9	42.5	43.1	43.6	44.1	44.7	45.1	45.6	45.9	46.2	46.5	1.2%

Source: Moody's Analytics (formerly Economy.com)

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Virginia State Corporation Commission
eFiling CASE Document Cover Sheet

Case Number (if already assigned)	PUR-2023-00066
Case Name (if known)	Commonwealth of Virginia, ex rel. State Corporation Commission, In re: Virginia Electric and Power Company's 2023 Integrated Resource Plan filing pursuant to Va. Code § 56-597 et seq.
Document Type	APLA
Document Description Summary	5 of 6 Integrated Resource Plan of Virginia Electric and Power Company
Total Number of Pages	65
Submission ID	27435
eFiling Date Stamp	5/1/2023 3:04:52PM

Appendix 4N: Base Case Price Forecast (Nominal $)

	Fuel Price					Power and REC Prices			RTO Capacity Prices		Emission Prices				
Year	Henry Hub Natural Gas ($/MMBtu)	Zone 5 Delivered Natural Gas ($/MMBtu)	CAPP CSX: 12,500 1%S FOB ($/ton)	No. 2 Oil ($/MMBtu)	1% No.6 Oil ($/MMBtu)	PJM-DOM On-Peak ($/MWh)	PJM-DOM Off-Peak ($/MWh)	PJM Tier 1 REC Prices ($/MWh)	($/kW-yr)	($/MW-day)*	SO_2 ($/Ton)	CSAPR Ozone NO_x ($/Ton)	CSAPR Annual NO_x ($/Ton)	Federal CO_2 Price ($/Ton)	RGGI CO_2 ($/Ton)
2023	2.70	3.44	96.00	19.44	11.25	51.90	39.35	28.70	14.20	38.89	2.45	16,345.47	2.04	-	13.27
2024	3.41	4.96	100.35	18.52	11.05	54.98	44.28	27.42	16.00	43.85	2.53	16,588.87	2.13	-	-
2025	4.13	4.71	105.32	17.90	11.71	57.08	44.82	25.54	22.30	61.10	2.93	9,997.19	2.74	-	-
2026	4.15	3.65	95.69	17.96	12.15	52.96	42.65	26.00	28.68	78.57	3.29	3,955.39	3.28	-	-
2027	4.05	3.44	86.41	18.30	12.37	47.50	39.85	23.92	35.31	96.73	3.36	3,024.10	3.36	-	-
2028	3.96	3.36	78.03	18.66	12.61	43.01	37.38	20.38	42.20	115.61	3.43	2,055.99	3.43	-	-
2029	3.86	3.21	70.64	19.03	12.86	38.45	34.33	17.58	49.37	135.25	3.50	1,048.75	3.50	-	-
2030	3.76	3.27	65.03	19.39	13.10	36.01	33.32	14.02	56.76	155.51	3.56	3.56	3.56	-	-
2031	3.96	3.43	65.84	19.75	13.35	37.18	34.72	13.27	62.45	171.09	3.63	3.63	3.63	-	-
2032	4.17	3.61	67.49	20.11	13.59	38.50	36.20	12.52	66.88	183.23	3.70	3.70	3.70	-	-
2033	4.38	3.83	69.35	20.48	13.84	40.23	38.07	11.76	71.45	195.76	3.77	3.77	3.77	-	-
2034	4.60	4.06	71.19	20.87	14.10	41.91	39.98	11.00	76.20	208.77	3.84	3.84	3.84	-	-
2035	4.82	4.31	73.07	21.27	14.37	43.92	42.06	10.25	81.15	222.32	3.92	3.92	3.92	-	-
2036	4.83	4.33	74.77	21.68	14.65	45.46	44.79	9.25	86.22	236.23	3.99	3.99	3.99	3.18	-
2037	4.84	4.31	76.49	22.11	14.94	46.65	47.28	8.19	91.44	250.53	4.07	4.07	4.07	6.49	-
2038	4.85	4.32	78.37	22.56	15.24	48.02	49.94	7.01	96.86	265.37	4.16	4.16	4.16	9.93	-

Note:

1) The 2023 - 2025 prices are a blend of futures/forwards and forecast prices for all commodities except capacity. 2026 and beyond are forecast prices.

2) Capacity prices reflect PJM RPM auction clearing prices through delivery year 2023/2024, forecast thereafter.

3) CO2 prices reflect RGGI Market Price for 2023 and the federal carbon price forecast 2036 and beyond.

4) CSAPR SO_2 and nationwide SO_2 prices are used as the SO_2 market price.

*RTO Capacity prices are restated in the units used by the PJM Capacity market.

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Appendix 4N: Commodity Price Forecast, Natural Gas

	Henry Hub Natural Gas ($/MMBtu)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	2.70	2.70	2.70	2.70
2024	3.41	3.41	3.44	3.37
2025	4.13	4.13	4.38	3.37
2026	4.15	4.15	4.95	3.06
2027	4.05	4.05	5.26	3.15
2028	3.96	3.96	5.58	3.27
2029	3.86	3.86	5.92	3.40
2030	3.76	3.76	6.26	3.53
2031	3.96	3.96	6.56	3.62
2032	4.17	4.17	6.86	3.70
2033	4.38	4.38	7.17	3.79
2034	4.60	4.60	7.50	3.88
2035	4.82	4.82	7.84	3.98
2036	4.83	4.83	8.15	4.03
2037	4.84	4.84	8.46	4.08
2038	4.85	4.85	8.79	4.14

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

Appendix 4N: Commodity Price Forecast, Natural Gas

	Zone 5 Delivered Natural Gas ($/MMBtu)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	3.44	3.44	3.44	3.44
2024	4.96	4.96	5.00	4.93
2025	4.71	4.71	4.96	3.95
2026	3.65	3.65	4.46	2.56
2027	3.44	3.44	4.66	2.55
2028	3.36	3.36	4.99	2.67
2029	3.21	3.21	5.26	2.74
2030	3.27	3.27	5.77	3.04
2031	3.43	3.43	6.03	3.09
2032	3.61	3.61	6.31	3.15
2033	3.83	3.83	6.62	3.24
2034	4.06	4.06	6.96	3.35
2035	4.31	4.31	7.32	3.47
2036	4.33	4.33	7.64	3.53
2037	4.31	4.31	7.93	3.55
2038	4.32	4.33	8.27	3.61

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

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Appendix 4N: Commodity Price Forecast, Coal (FOB)

	CAPP CSX: 12,500 1%S FOB ($/ton)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	96.00	96.00	96.00	96.00
2024	100.35	100.35	100.35	100.35
2025	105.32	105.32	105.33	105.32
2026	95.69	95.69	95.76	95.69
2027	86.41	86.41	86.55	86.41
2028	78.03	78.03	78.35	78.03
2029	70.64	70.64	70.93	70.64
2030	65.03	65.03	65.45	65.03
2031	65.84	65.84	66.25	65.84
2032	67.49	67.49	67.97	67.49
2033	69.35	69.35	69.75	69.35
2034	71.19	71.19	71.66	71.19
2035	73.07	73.07	73.44	73.07
2036	74.77	74.77	75.12	74.77
2037	76.49	76.49	76.94	76.49
2038	78.37	78.37	78.69	78.37

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

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Appendix 4N: Commodity Price Forecast, Oil

	No. 2 Oil ($/MMBtu)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	19.44	19.44	19.44	19.44
2024	18.52	18.52	18.56	18.48
2025	17.90	17.90	18.61	17.32
2026	17.96	17.96	19.37	16.73
2027	18.30	18.30	19.89	16.70
2028	18.66	18.66	20.31	16.73
2029	19.03	19.03	21.82	17.11
2030	19.39	19.39	22.39	17.20
2031	19.75	19.75	22.89	17.34
2032	20.11	20.11	23.49	17.93
2033	20.48	20.48	24.05	18.33
2034	20.87	20.87	24.61	18.63
2035	21.27	21.27	24.99	18.93
2036	21.68	21.68	25.47	19.21
2037	22.11	22.11	25.88	19.61
2038	22.56	22.56	26.27	20.00

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

Appendix 4N: Commodity Price Forecast, Oil

	1% No. 6 Oil ($/MMBtu)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	11.25	11.25	11.25	11.25
2024	11.05	11.05	11.08	11.03
2025	11.71	11.71	12.25	11.26
2026	12.15	12.15	13.23	11.20
2027	12.37	12.37	13.59	11.14
2028	12.61	12.61	13.87	11.13
2029	12.86	12.86	15.00	11.39
2030	13.10	13.10	15.41	11.42
2031	13.35	13.35	15.75	11.50
2032	13.59	13.59	16.18	11.91
2033	13.84	13.84	16.57	12.19
2034	14.10	14.10	16.97	12.38
2035	14.37	14.37	17.22	12.58
2036	14.65	14.65	17.55	12.75
2037	14.94	14.94	17.83	13.02
2038	15.24	15.24	18.08	13.28

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

Appendix 4N: Commodity Price Forecast, On-Peak Power Price

	PJM-DOM On-Peak ($/MWh)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	51.90	51.90	51.90	51.90
2024	54.98	55.01	55.44	54.65
2025	57.08	57.88	60.13	48.05
2026	52.96	54.00	61.30	41.49
2027	47.50	48.27	59.05	39.58
2028	43.01	43.57	57.39	37.71
2029	38.45	38.81	55.10	35.14
2030	36.01	36.19	53.83	34.63
2031	37.18	37.38	55.82	34.98
2032	38.50	38.73	57.97	35.47
2033	40.23	40.50	60.56	36.38
2034	41.91	42.22	63.13	37.27
2035	43.92	44.26	66.08	38.48
2036	45.46	45.74	69.35	40.40
2037	46.65	46.86	72.41	42.01
2038	48.02	48.17	75.59	43.87

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

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Appendix 4N: Commodity Price Forecast, Off-Peak Power Price

	PJM-DOM Off-Peak ($/MWh)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	39.35	39.35	39.35	39.35
2024	44.28	44.29	44.66	44.01
2025	44.82	45.18	47.46	37.40
2026	42.65	43.12	49.68	32.65
2027	39.85	40.22	49.71	32.42
2028	37.38	37.66	49.91	32.11
2029	34.33	34.50	49.21	30.96
2030	33.32	33.42	49.94	31.92
2031	34.72	34.84	52.09	32.58
2032	36.20	36.35	54.32	33.31
2033	38.07	38.29	56.99	34.45
2034	39.98	40.23	59.71	35.60
2035	42.06	42.36	62.61	36.93
2036	44.79	45.03	66.93	40.05
2037	47.28	47.46	71.28	42.99
2038	49.94	50.07	75.81	46.19

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

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Appendix 4N: Commodity Price Forecast, PJM Tier 1 Renewable Energy Certificates

	PJM Tier 1 REC Prices ($/MWh)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	28.70	28.70	28.70	28.70
2024	27.42	27.42	27.42	27.42
2025	25.54	25.54	25.54	25.54
2026	26.00	25.82	12.06	30.59
2027	23.92	23.82	8.81	28.16
2028	20.38	20.32	4.61	24.44
2029	17.58	17.57	3.53	21.74
2030	14.02	14.02	3.60	18.55
2031	13.27	13.27	3.67	18.34
2032	12.52	12.52	3.74	18.14
2033	11.76	11.76	3.81	17.94
2034	11.00	11.00	3.88	17.77
2035	10.25	10.25	3.95	17.62
2036	9.25	9.26	4.03	16.84
2037	8.19	8.19	4.11	16.02
2038	7.01	7.01	4.20	15.18

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

Appendix 4N: Commodity Price Forecast, VA REC

	VA REC Prices ($/MWh)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	24.52	24.52	24.52	24.52
2024	24.54	24.54	24.54	24.54
2025	47.45	47.45	47.45	47.45
2026	26.03	25.85	11.90	30.69
2027	23.92	23.82	8.81	28.16
2028	20.38	20.32	4.61	24.44
2029	17.58	17.57	3.53	21.74
2030	14.02	14.02	3.60	18.55
2031	13.27	13.27	3.67	18.34
2032	12.52	12.52	3.74	18.14
2033	11.76	11.76	3.81	17.94
2034	11.00	11.00	3.88	17.77
2035	10.25	10.25	3.95	17.62
2036	9.25	9.26	4.03	16.91
2037	8.19	8.19	4.11	16.14
2038	7.01	7.01	4.20	15.35

Note: Reflects the ICF forecast price for the entire period rather than blending the ICF forecast with market prices.

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Appendix 4N: Commodity Price Forecast, PJM RTO Capacity

Year	PJM RTO Capacity Prices ($/kW-yr)			
	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	14.20	14.20	14.20	14.20
2024	16.00	16.00	15.37	15.99
2025	22.30	22.30	20.55	22.27
2026	28.68	28.67	25.77	28.62
2027	35.31	35.30	31.19	35.22
2028	42.20	42.19	36.83	42.08
2029	49.37	49.35	42.70	49.22
2030	56.76	56.75	48.74	56.59
2031	62.45	62.41	54.09	62.67
2032	66.88	66.79	58.94	67.82
2033	71.45	71.31	63.95	73.15
2034	76.20	76.01	69.15	78.67
2035	81.15	80.90	74.56	84.42
2036	86.22	86.00	79.86	89.18
2037	91.44	91.28	85.11	93.23
2038	96.86	96.76	90.57	97.43

Note: PJM RPM auction clearing price through delivery year 2023/24, forecast thereafter.

Appendix 4N: Commodity Price Forecast, PJM RTO Capacity

Year	RTO Capacity Prices ($/MW-day)			
	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	38.89	38.89	38.89	38.89
2024	43.85	43.84	42.11	43.81
2025	61.10	61.10	56.31	61.00
2026	78.57	78.55	70.60	78.40
2027	96.73	96.71	85.45	96.49
2028	115.61	115.58	100.90	115.29
2029	135.25	135.22	116.97	134.86
2030	155.51	155.47	133.55	155.04
2031	171.09	170.98	148.19	171.71
2032	183.23	182.98	161.47	185.82
2033	195.76	195.38	175.19	200.40
2034	208.77	208.25	189.44	215.54
2035	222.32	221.66	204.27	231.30
2036	236.23	235.60	218.79	244.34
2037	250.53	250.08	233.19	255.43
2038	265.37	265.10	248.14	266.92

Note:

1) RTO capacity prices are restated in the units used by the PJM capacity market.

2) PJM RPM auction clearing price through delivery year 2023/24, forecast thereafter.

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Appendix 4N: Commodity Price Forecast, SO_2 Emission Allowances

	SO_2 ($/Ton)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	2.45	2.45	2.45	2.45
2024	2.53	2.53	2.53	2.53
2025	2.93	2.93	2.93	2.93
2026	3.29	3.29	3.29	3.29
2027	3.36	3.36	3.36	3.36
2028	3.43	3.43	3.43	3.43
2029	3.50	3.50	3.50	3.50
2030	3.56	3.56	3.56	3.56
2031	3.63	3.63	3.63	3.63
2032	3.70	3.70	3.70	3.70
2033	3.77	3.77	3.77	3.77
2034	3.84	3.84	3.84	3.84
2035	3.92	3.92	3.92	3.92
2036	3.99	3.99	3.99	3.99
2037	4.07	4.07	4.07	4.07
2038	4.16	4.16	4.16	4.16

Note:

1) CSAPR SO2 and nationwide SO2 prices are used as the SO2 market price.

2) The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

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Appendix 4N: Commodity Price Forecast, NOx Emission Allowances

	CSAPR Ozone NOx ($/Ton)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	16,345.47	16,345.47	16345.47	16,345.47
2024	16,588.87	16,588.87	16600.51	16,571.94
2025	9,997.19	9,997.19	11181.59	7,815.38
2026	3,955.39	3,955.39	5603.47	878.98
2027	3,024.10	3,024.10	4368.15	672.02
2028	2,055.99	2,055.99	2969.77	456.89
2029	1,048.75	1,048.75	1514.86	233.05
2030	3.56	3.56	1187.86	3.56
2031	3.63	3.63	968.43	3.63
2032	3.70	3.70	739.88	3.70
2033	3.77	3.77	502.47	3.77
2034	3.84	3.84	256.02	3.84
2035	3.92	3.92	3.92	3.92
2036	3.99	3.99	3.99	3.99
2037	4.07	4.07	4.07	4.07
2038	4.16	4.16	4.16	4.16

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

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Appendix 4N: Commodity Price Forecast, NOx Emission Allowances

	CSAPR Annual NOx ($/Ton)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	2.04	2.04	2.04	2.04
2024	2.13	2.13	2.13	2.13
2025	2.74	2.74	2.74	2.74
2026	3.28	3.28	3.28	3.28
2027	3.36	3.36	3.36	3.36
2028	3.43	3.43	3.43	3.43
2029	3.50	3.50	3.50	3.50
2030	3.56	3.56	3.56	3.56
2031	3.63	3.63	3.63	3.63
2032	3.70	3.70	3.70	3.70
2033	3.77	3.77	3.77	3.77
2034	3.84	3.84	3.84	3.84
2035	3.92	3.92	3.92	3.92
2036	3.99	3.99	3.99	3.99
2037	4.07	4.07	4.07	4.07
2038	4.16	4.16	4.16	4.16

Note: The 2023 - 2025 prices are a blend of futures/forwards and forecast prices. 2026 and beyond are forecast prices.

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Appendix 4N: Commodity Price Forecast, CO_2

	Federal CO_2 ($/Ton)			
Year	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	-	-	-	-
2024	-	-	-	-
2025	-	-	-	-
2026	-	-	-	-
2027	-	-	-	-
2028	-	-	-	-
2029	-	-	-	-
2030	-	-	-	-
2031	-	-	-	-
2032	-	-	-	-
2033	-	-	-	-
2034	-	-	-	-
2035	-	-	-	-
2036	3.18	3.18	3.18	3.18
2037	6.49	6.49	6.49	6.49
2038	9.93	9.93	9.93	9.93

Note: CO2 prices reflect RGGI Market Price for 2023 and the federal carbon price forecast 2036 and beyo

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Appendix 4N: Commodity Price Forecast, CO_2

Year	RGGI CO_2 ($/Ton)			
	Base Case Commodity Forecast	VA in RGGI Commodity Forecast	High Fuel Price Commodity Forecast	Low Fuel Price Case Commodity Forecast
2023	13.27	13.27	13.27	13.27
2024	-	13.67	-	-
2025	-	9.45	-	-
2026	-	5.05	-	-
2027	-	4.70	-	-
2028	-	4.51	-	-
2029	-	4.32	-	-
2030	-	4.13	-	-
2031	-	4.29	-	-
2032	-	4.43	-	-
2033	-	4.59	-	-
2034	-	4.75	-	-
2035	-	4.92	-	-
2036	-	3.42	-	-
2037	-	-	-	-
2038	-	-	-	-

Note:

1) ICF assumes a charge on CO2 from the U.S. power sector during 2036, and it is assumed that RGGI states and CA transition from their respective programs to the national program once the national prices are higher.

2) RGGI price forecasts assume Virginia exits RGGI before January 1, 2024, except for the VA in RGGI commodity forecast, which assumes that Virginia remains in RGGI.

Appendix 4O – Delivered Fuel Data (Plan B Specific)

Company Name: Virginia Electric and Power Company

Schedule 18

FUEL DATA

	(ACTUAL)				(PROJECTED)														
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
I. Delivered Fuel Price ($/mmBtu)[1]																			
a. Nuclear	0.59	0.58	0.58	0.55	0.56	0.57	0.58	0.59	0.58	0.56	0.56	0.58	0.64	0.67	0.70	0.74	0.78	0.81	0.86
b. Biomass	3.05	3.75	3.95	3.40	3.48	3.52	3.60	3.67	3.74	3.81	3.89	3.96	3.98	4.03	4.05	4.06	4.14	4.23	4.32
c. Coal	2.70	2.46	3.04	4.30	4.30	4.33	4.04	3.78	3.55	3.32	3.16	3.18	3.24	3.31	3.40	3.48	3.57	3.65	3.74
d. Heavy Fuel Oil	7.11	14.23	-	12.65	12.37	13.05	13.51	13.76	14.03	14.31	14.58	14.85	15.12	15.51	15.91	16.34	16.72	17.13	17.55
e. Light Fuel Oil[2]	14.15	14.25	18.31	20.90	19.25	18.64	18.72	19.08	19.44	19.83	20.21	20.58	20.96	21.34	21.74	22.16	22.59	23.04	23.50
f. Natural Gas	2.58	4.04	7.15	4.23	4.38	4.48	3.69	3.47	3.39	3.23	3.30	3.47	3.64	3.83	4.03	4.22	4.22	4.24	4.25
II. Primary Fuel Expenses (cents/kWh)[3]																			
a. Nuclear	0.60	0.60	0.58	0.58	0.58	0.59	0.61	0.61	0.60	0.58	0.58	0.60	0.66	0.70	0.73	0.77	0.81	0.85	0.89
b. Biomass	4.34	2.74	3.68	4.02	4.03	3.98	4.07	4.16	4.25	4.32	4.39	4.45	4.44	4.56	4.65	4.69	4.75	4.85	4.95
c. Coal	3.39	5.38	2.69	0.10	4.18	4.22	3.93	3.72	3.51	3.26	3.07	3.10	3.15	3.22	3.31	3.39	3.47	3.55	3.64
d. Heavy Fuel Oil	5.70	15.81	5.01	11.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
e. Light Fuel Oil[2]	18.41	2.91	14.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
f. Natural Gas	1.87	5.61	7.30	2.91	2.90	3.01	2.82	2.69	2.64	2.52	2.55	2.70	2.82	2.97	3.11	3.25	3.26	3.26	3.28
g. PPA[4]	4.57	4.71	5.73	6.83	6.78	6.79	6.76	6.72	6.69	6.77	6.88	7.03	7.18	7.33	7.48	7.65	7.81	7.99	8.15
i. Economy Energy Purchases[5]	2.82	5.13	8.64	3.83	3.80	3.84	3.85	3.07	2.94	2.96	3.00	3.10	3.30	3.41	3.56	3.84	4.10	4.35	4.61
j. Capacity Purchases ($/kW-Year)	31.49	41.52	31.84	14.20	11.35	18.83	28.68	35.31	42.20	49.37	56.76	62.45	66.88	71.45	76.20	81.15	85.22	91.44	96.86

(1) Delivered fuel price for NAPP (12,900, 3.2% FOB), No. 2 Oil, No. 6 Oil and DOM Zone Delivered Natural Gas are used to represent Coal, Heavy Fuel, Light Fuel Oil, and Natural Gas respectively.

(2) Light fuel oil is used for reliability only at dual-fuel facilities.

(3) Primary Fuel Expenses for Nuclear, Biomass, Coal, Heavy Fuel Oil, and Natural Gas are based on North Anna 1, Altavista, Mount Storm 1, Yorktown 3, and Possum Point 6, respectively.

(4) Average of PPA fuel expenses.

(5) Average cost of market energy purchases.

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Appendix 5A – Existing Generation Units in Service

Company Name: Virginia Electric and Power Company

Schedule 14a

UNIT PERFORMANCE DATA

Existing Supply-Side Resources (MW)

Unit Name[1]	Location	Unit Class	Primary Fuel Type	C.O.D.[3]	MW Summer
Altavista	VA	Baseload	Biomass	1992	51
Bath County 1	VA	Intermediate	Pumped Storage	1985	301
Bath County 2	VA	Intermediate	Pumped Storage	1985	301
Bath County 3	VA	Intermediate	Pumped Storage	1985	301
Bath County 4	VA	Intermediate	Pumped Storage	1985	301
Bath County 5	VA	Intermediate	Pumped Storage	1985	301
Bath County 6	VA	Intermediate	Pumped Storage	1985	301
Bear Garden	VA	Baseload/Intermediate	Natural Gas	2011	622
Brunswick	VA	Baseload/Intermediate	Natural Gas	2016	1,401
Chesapeake CT 1, 4, 6	VA	Peak	Light Oil	1967	39
Chesterfield 5[2]	VA	Baseload	Coal	1964	337
Chesterfield 6[2]	VA	Baseload	Coal	1969	678
Chesterfield 7	VA	Intermediate	Natural Gas	1990	191
Chesterfield 8	VA	Intermediate	Natural Gas	1992	195
Clover 1	VA	Intermediate	Coal	1995	220
Clover 2	VA	Intermediate	Coal	1996	219
Colonial Trail West	VA	Intermittent	Solar	2019	37
CVOW (Demonstration)	VA	Intermittent	Wind	2020	3
Darbytown 1	VA	Peak	Natural Gas	1990	85
Darbytown 2	VA	Peak	Natural Gas	1990	85
Darbytown 3	VA	Peak	Natural Gas	1990	85
Darbytown 4	VA	Peak	Natural Gas	1990	85
Elizabeth River 1	VA	Peak	Natural Gas	1992	109
Elizabeth River 2	VA	Peak	Natural Gas	1992	107
Elizabeth River 3	VA	Peak	Natural Gas	1992	109
Gaston Hydro	NC	Intermittent	Hydro	1963	220
South Anna 1	VA	Intermediate	Natural Gas	1994	104
South Anna 1	VA	Intermediate	Natural Gas	1994	104
Grassfield Solar	VA	Intermittent	Solar	2022	7
Gravel Neck 1-2	VA	Peak	Light Oil	1970	28
Gravel Neck 3	VA	Peak	Natural Gas	1989	85
Gravel Neck 4	VA	Peak	Natural Gas	1989	85
Gravel Neck 5	VA	Peak	Natural Gas	1989	85
Gravel Neck 6	VA	Peak	Natural Gas	1989	85
Greensville	VA	Baseload/Intermediate	Natural Gas	2018	1,588
Hopewell	VA	Baseload	Biomass	1989	51
Ladysmith 1	VA	Peak	Natural Gas	2001	151
Ladysmith 2	VA	Peak	Natural Gas	2001	151

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Appendix 5A – Existing Generation Units in Service

Company Name: Virginia Electric and Power Company

Schedule 14a

UNIT PERFORMANCE DATA

Existing Supply-Side Resources (MW)

Unit Name[1]	Location	Unit Class	Primary Fuel Type	C.O.D.[3]	MW Summer
Ladysmith 3	VA	Peak	Natural Gas	2008	160
Ladysmith 4	VA	Peak	Natural Gas	2008	160
Ladysmith 5	VA	Peak	Natural Gas	2009	161
Lowmoor CT 1-4	VA	Peak	Light Oil	1971	48
Mount Storm 1	WV	Baseload	Coal	1965	544
Mount Storm 2	WV	Baseload	Coal	1966	553
Mount Storm 3	WV	Baseload	Coal	1973	520
Mount Storm CT	WV	Peak	Light Oil	1967	11
North Anna 1	VA	Baseload	Nuclear	1978	838
North Anna 2	VA	Baseload	Nuclear	1980	835
North Anna Hydro	VA	Intermittent	Hydro	1987	1
Northern Neck CT 1-4	VA	Peak	Natural Gas	1971	47
Possum Point 6	VA	Baseload/Intermediate	Natural Gas	2003	573
Possum Point CT 1-6	VA	Peak	Light Oil	1968	72
Water Strider PPA	VA	Intermittent	Solar	2021	29
Westmoreland PPA	VA	Intermittent	Solar	2021	7
Remington 1	VA	Peak	Natural Gas	2000	150
Remington 2	VA	Peak	Natural Gas	2000	151
Remington 3	VA	Peak	Natural Gas	2000	152
Remington 4	VA	Peak	Natural Gas	2000	151
Roanoke Rapids Hydro	NC	Intermittent	Hydro	1955	95
Rosemary	NC	Peak	Natural Gas	1990	155
Sadler Solar	VA	Intermittent	Solar	2021	27
Scott Solar	VA	Intermittent	Solar	2016	5
Solar Partnership Program	VA	Intermittent	Solar	2012	2
Southampton	VA	Baseload	Biomass	1992	51
Spring Grove	VA	Intermittent	Solar	2020	26
Surry 1	VA	Baseload	Nuclear	1972	838
Surry 2	VA	Baseload	Nuclear	1973	838
Sycamore Solar	VA	Intermittent	Solar	2023	14
Virginia City Hybrid Energy Center	VA	Baseload/Intermediate	Coal	2012	610
Warren	VA	Baseload/Intermediate	Natural Gas	2014	1,381
Whitehouse Solar	VA	Intermittent	Solar	2016	5
Woodland Solar	VA	Intermittent	Solar	2016	5
Yorktown 3[2]	VA	Peak	Heavy Oil	1974	767
Norge Solar	VA	Intermittent	Solar	2023	7
Chesapeake PPA	VA	Intermittent	Solar	2024	41
Pleasant Hill PPA	VA	Intermittent	Solar	2023	7

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Appendix 5A – Existing Generation Units in Service

Company Name: Virginia Electric and Power Company

Schedule 14a

UNIT PERFORMANCE DATA

Existing Supply-Side Resources (MW)

Unit Name[1]	Location	Unit Class	Primary Fuel Type	C.O.D.[3]	MW Summer
Rivanna PPA	VA	Intermittent	Solar	2024	4
Watlington PPA	VA	Intermittent	Solar	2023	7
Wythe 2 PPA	VA	Intermittent	Solar	2024	26
Black Bear Distributed	VA	Intermittent	Solar	2024	0
Clean Energy 2 DER 2	VA	Intermittent	Solar	2023	4
Clean Energy 2 DER 3	VA	Intermittent	Solar	2023	2
Springfield Distributed	VA	Intermittent	Solar	2024	1
Cox PPA	VA	Intermittent	Solar	2024	4
Sinai PPA	VA	Intermittent	Solar	2024	3
Stratford PPA	VA	Intermittent	Solar	2023	4
Camellia Solar	VA	Intermittent	Solar	2024	5
Fountain Creek Solar	VA	Intermittent	Solar	2024	21
Otter Creek Solar	VA	Intermittent	Solar	2024	16
Piney Creek Base Solar	VA	Intermittent	Solar	2024	21
Quillwort Solar	VA	Intermittent	Solar	2024	5
Sebera Solar	VA	Intermittent	Solar	2024	5
Solidago Solar	VA	Intermittent	Solar	2023	5
Walnut Solar	VA	Intermittent	Solar	2023	40
Winterberry Solar	VA	Intermittent	Solar	2023	5
Winterpock Solar	VA	Intermittent	Solar	2024	5
Clean Energy 3 DER 1	VA	Intermittent	Solar	2024	1
Clean Energy 3 DER 2	VA	Intermittent	Solar	2024	3
Cox Storage	VA	Peak	Grid	2024	7
Sinai Storage	VA	Peak	Grid	2024	4
Dry Bridge Storage	VA	Peak	Grid	2023	18
Subtotal - Base					6,133
Subtotal - Baseload/Intermediate					6,175
Subtotal - Intermediate					2,840
Subtotal - Peak					3,587
Subtotal - Intermittent					724
Total					19,459

Note: Summer MW's for solar generation (renewables) represents firm capacity.

(1) Exisiting generators as of 2024

(2) Chesterfield 5 & 6 and Yorktown 3 are due to be retired by the end of 2023.

(3) Commercial operation date

Appendix 5B - Other Generation Units

Company Name: Virginia Electric and Power Company

Schedule 14b

UNIT PERFORMANCE DATA

Existing Supply-Side Resources (kW)

Unit Name	Location	Primary Fuel Type	kW Summer	Contract Start	Contract Expiration
Purchase Power Agreement (PPA) Units[1]					
Alexandria/Arlington - Covanta	VA	Municipal Solid Waste	21,000	1/29/1988	1/28/2023
Brasfield Dam	VA	Hydro	2,800	10/12/1993	Auto renew
Suffolk Landfill	VA	Methane	3,280	8/1/2020	3/31/2022
Columbia Mills	VA	Hydro	343	2/7/1985	Auto renew
Lakeview (Swift Creek) Dam	VA	Hydro	400	11/26/2008	Auto renew
MeadWestvaco (formerly Westvaco)	VA	Coal/Biomass	140,000	11/3/1982	8/25/2028
Banister Dam	VA	Hydro	1,785	9/28/2008	Auto renew
Weyerhaeuser/Domtar	NC	Coal/biomass	9000(2)	7/27/1991	Auto renew
Smurfit-Stone Container	VA	Coal/biomass	3500(3)	3/21/1981	Auto renew
Burnshire Dam	VA	Hydro	100	7/11/2016	Auto renew
Cushaw Hydro	VA	Hydro	2,000	11/21/2018	11/20/2033
Essex Solar Center	VA	Solar	20,000	12/14/2017	12/13/2037
Rives Road Solar	VA	Solar	19,700	5/15/2020	5/14/2033
Pamplin Solar	VA	Solar	15,700	7/13/2020	7/12/2033
Hickory Solar	VA	Solar	32,000	9/8/2020	9/7/2033
Mt Jackson I Solar	VA	Solar	15,650	6/14/2021	6/13/2034
Hollyfield II Solar	VA	Solar	13,000	7/22/2021	7/21/2034
Buckingham II Solar	VA	Solar	20,000	7/28/2021	7/27/2034
Water Strider Solar	VA	Solar	80,000	5/15/2021	5/14/2041
Westmoreland County Solar	VA	Solar	20,000	10/22/2021	10/21/2041
Tredegar Solar	VA	Solar	480	11/18/2022	11/17/2032
Nokesville Solar	VA	Solar	20,000	11/22/2022	11/21/2035
Rappahannock Solar	VA	Solar	1,500	11/24/2021	11/23/2036
W. E. Partners II	NC	Biomass	300	3/15/2012	Auto renew
Plymouth Solar	NC	Solar	5,000	10/4/2012	10/3/2027
W. E. Partners 1	NC	Biomass	100	4/26/2013	Auto renew
Dogwood Solar	NC	Solar	20,000	12/9/2014	12/8/2029
HXOap Solar	NC	Solar	20,000	12/16/2014	12/15/2029
Bethel Price Solar	NC	Solar	5,000	12/9/2014	12/8/2029
Jakana Solar	NC	Solar	5,000	12/4/2014	12/3/2029
Lewiston Solar	NC	Solar	5,000	12/18/2014	12/17/2029
Williamston Solar	NC	Solar	5,000	12/4/2014	12/3/2029
Windsor Solar	NC	Solar	5,000	12/17/2014	12/16/2029
510 REPP One Solar	NC	Solar	1,250	3/11/2015	3/10/2030
Everette Wildcat Solar	NC	Solar	5,000	3/11/2015	3/10/2030
SolNC5 Solar	NC	Solar	5,000	5/12/2015	5/11/2030
Creswell Aligood Solar	NC	Solar	14,000	5/13/2015	5/12/2030
Two Mile Desert Road - SolNC1	NC	Solar	5,000	8/10/2015	8/9/2030
SolNCPower6 Solar	NC	Solar	5,000	11/1/2015	10/31/2030
Downs Farm Solar	NC	Solar	5,000	12/1/2015	11/30/2030
GKS Solar- SolNC2	NC	Solar	5,000	12/16/2015	12/15/2030
Windsor Cooper Hill Solar	NC	Solar	5,000	12/18/2015	12/17/2030

Appendix 5B - Other Generation Units

Company Name: Virginia Electric and Power Company

Schedule 14b

UNIT PERFORMANCE DATA

Existing Supply-Side Resources (kW)

Unit Name	Location	Primary Fuel Type	kW Summer	Contract Start	Contract Expiration
Purchase Power Agreement (PPA) Units[1]					
Green Farm Solar	NC	Solar	5,000	1/6/2016	1/5/2031
FAE X - Shawboro	NC	Solar	20,000	1/26/2016	1/25/2031
FAE XVII - Watson Seed	NC	Solar	20,000	1/28/2016	1/27/2031
Bradley PVI- FAE IX	NC	Solar	5,000	2/4/2016	2/3/2031
Conetoe Solar	NC	Solar	5,000	2/5/2016	2/4/2031
SolNC3 Solar-Sugar Run Solar	NC	Solar	5,000	2/5/2016	2/4/2031
Gates Solar	NC	Solar	5,000	2/8/2016	2/7/2031
Long Farm 46 Solar	NC	Solar	5,000	2/12/2016	2/11/2031
Battleboro Farm Solar	NC	Solar	5,000	2/17/2016	2/16/2031
Winton Solar	NC	Solar	5,000	2/8/2016	2/7/2031
SolNC10 Solar	NC	Solar	5,000	1/13/2016	1/12/2031
Tarboro Solar	NC	Solar	5,000	12/31/2015	12/30/2030
Bethel Solar	NC	Solar	4,400	3/3/2016	3/2/2031
Garysburg Solar	NC	Solar	5,000	3/18/2016	3/17/2031
Woodland Solar	NC	Solar	5,000	4/7/2016	4/6/2031
Gaston Solar	NC	Solar	5,000	4/18/2016	4/17/2031
TWE Kelford Solar	NC	Solar	4,700	6/6/2016	6/5/2031
FAE XVIII - Meadows	NC	Solar	20,000	6/9/2016	6/8/2031
Seaboard Solar	NC	Solar	5,000	6/29/2016	6/28/2031
Simons Farm Solar	NC	Solar	5,000	7/13/2016	7/12/2031
Whitakers Farm Solar	NC	Solar	3,400	7/20/2016	7/19/2031
MC1 Solar	NC	Solar	5,000	8/19/2016	8/18/2031
Williamston West Farm Solar	NC	Solar	5,000	8/23/2016	8/22/2031
River Road Solar	NC	Solar	5,000	8/23/2016	8/22/2031
White Farm Solar	NC	Solar	5,000	8/26/2016	8/25/2031
Hardison Farm Solar	NC	Solar	5,000	9/9/2016	9/8/2031
Modlin Farm Solar	NC	Solar	5,000	9/14/2016	9/13/2031
Battleboro Solar	NC	Solar	5,000	10/7/2016	10/6/2031
Williamston Speight Solar	NC	Solar	15,000	11/23/2016	11/22/2031
Barnhill Road Solar	NC	Solar	3,100	11/30/2016	11/29/2031
Hemlock Solar	NC	Solar	5,000	12/5/2016	12/4/2031
Leggett Solar	NC	Solar	5,000	12/14/2016	12/13/2031
Schell Solar Farm	NC	Solar	5,000	12/22/2016	12/21/2031
FAE XXXV - Turkey Creek	NC	Solar	13,500	1/31/2017	1/30/2027
FAE XXII - Baker PVI	NC	Solar	5,000	1/30/2017	1/29/2032
FAE XXI -Benthall Bridge PVI	NC	Solar	5,000	1/30/2017	1/29/2032
Aulander Hwy 42 Solar	NC	Solar	5,000	12/30/2016	12/29/2031
Floyd Road Solar	NC	Solar	5,000	6/19/2017	6/18/2032
Flat Meeks- FAE II	NC	Solar	5,000	10/27/2017	10/26/2032
HXNAir Solar One	NC	Solar	5,000	12/21/2017	12/20/2032
Cork Oak Solar	NC	Solar	20,000	12/29/2017	12/28/2027
Sunflower Solar	NC	Solar	16,000	12/29/2017	12/28/2027
Davis Lane Solar	NC	Solar	5,000	12/31/2017	12/30/2032

Appendix 5B - Other Generation Units

Company Name: Virginia Electric and Power Company **Schedule 14b**

UNIT PERFORMANCE DATA

Existing Supply-Side Resources (kW)

Unit Name	Location	Primary Fuel Type	kW Summer	Contract Start	Contract Expiration
Purchase Power Agreement (PPA) Units[1]					
FAE XIX- American Legion PVI	NC	Solar	15,840	1/2/2018	1/1/2033
FAE XXV-Vaughn's Creek	NC	Solar	20,000	1/2/2018	1/1/2033
TWE Ahoskie Solar Project	NC	Solar	5,000	1/12/2018	1/11/2033
Cottonwood Solar	NC	Solar	3,000	1/25/2018	1/24/2033
Shiloh Hwy 1108 Solar	NC	Solar	5,000	2/9/2018	2/8/2033
Chowan Jehu Road Solar	NC	Solar	5,000	2/9/2018	2/8/2033
Phelps 158 Solar Farm	NC	Solar	5,000	2/26/2018	2/25/2033
Sandy Solar	NC	Solar	5,000	5/30/2018	5/29/2033
Northern Cardinal Solar	NC	Solar	2,000	6/29/2018	6/28/2033
Carl Friedrich Gauss Solar	NC	Solar	5,000	9/10/2018	9/9/2033
Sun Farm VI Solar	NC	Solar	4,975	9/10/2018	9/9/2033
Sun Farm V Solar	NC	Solar	4,975	9/10/2018	9/9/2033
Citizens Hertford	NC	Solar	16,200	6/6/2019	6/5/2029
Camden Dam Solar	NC	Solar	5,000	9/10/2018	9/9/2033
Mill Pond Solar	NC	Solar	5,000	9/10/2018	9/9/2033
Jamesville Road	NC	Solar	5,000	9/10/2018	9/9/2033
North 301	NC	Solar	20,000	12/18/2019	12/17/2029
Five Forks	NC	Solar	20,000	12/23/2019	12/22/2029
Whitehurst PVI Solar	NC	Solar	10,000	3/13/2020	3/12/2035
FAE XXXIII - Grandy	NC	Solar	20,000	3/13/2020	3/12/2030
Alpha Value Solar	NC	Solar	5,000	7/9/2020	9/9/2033
FAE XXXIV - Underwood	NC	Solar	16,000	10/23/2020	10/22/2030
Highway -158 PVI	NC	Solar	9,000	11/10/2020	11/9/2030
Gliden Solar	NC	Solar	5,000	12/30/2020	9/9/2033
Sun Farm VIII	NC	Solar	3,975	12/17/2020	9/9/2033
Ryland Road Solar	NC	Solar	5,000	8/31/2021	9/9/2033
Windsor Hwy 17 Solar	NC	Solar	5,000	8/28/2021	9/9/2033
Hertford Solar	NC	Solar	10,000	8/3/2022	8/2/2027

(1) In operation as of December 31, 2022; generating facilities that have contracted directly with the Company

(2) PPA is for excess energy only typically 4,000-14,000 kW.

(3) PPA is for excess energy only typically 3,500 kW.

230940075

Appendix 5C – Equivalent Availability Factor for Plan B

Company Name: Virginia Electric and Power Company

Schedule E

UNIT PERFORMANCE DATA

Equivalent Availability Factor (%)

	(ACTUAL)			(PROJECTED)															
Unit Name	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Altavista	71	77	77	78	82	82	82	82	80	80	80	80	80	80	80	80	80	80	80
Bath County 1	90	97	72	58	82	81	91	91	83	83	83	83	83	83	83	83	83	83	83
Bath County 2	87	49	74	91	91	70	91	91	83	83	83	83	83	83	83	83	83	83	83
Bath County 3	81	68	95	65	91	91	69	91	83	83	83	83	83	83	83	83	83	83	83
Bath County 4	76	78	95	72	91	91	79	91	83	83	83	83	83	83	83	83	83	83	83
Bath County 5	97	77	97	89	84	91	92	91	83	83	83	83	83	83	83	83	83	83	83
Bath County 8	89	77	96	51	84	91	91	91	83	83	83	83	83	83	83	83	83	83	83
Bear Garden	87	75	73	79	87	82	88	88	83	83	83	83	83	83	83	83	83	83	83
Brunswick	88	82	69	58	86	82	86	86	82	82	82	82	82	82	82	82	82	82	82
BTM Unit 1	N/A	N/A	N/A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
BTM Unit 2	N/A	N/A	N/A	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
BTM Unit 3	76	77	71	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Chesapeake CT 1, 4, 8	97	92	94	74	74	73	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 5	76	73	40	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 6	78	43	68	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 7	65	84	71	79	100	100	100	92	96	96	96	96	96	96	96	96	96	96	96
Chesterfield 8	44	68	70	80	92	100	100	92	96	96	96	96	96	96	96	96	96	96	96
Clover 1	73	62	79	78	81	82	81	82	77	77	77	77	77	77	77	77	77	77	77
Clover 2	65	73	81	77	84	76	76	76	81	81	81	81	81	81	81	81	81	81	81
Darbytown 1	71	66	50	97	97	97	97	94	96	96	96	96	96	96	96	96	96	96	96
Darbytown 2	98	87	74	97	97	93	97	94	96	96	96	96	96	96	96	96	96	96	96
Darbytown 3	81	87	70	97	97	97	97	94	96	96	96	96	96	96	96	96	96	96	96
Darbytown 4	97	91	71	97	97	97	97	94	96	96	96	96	96	96	96	96	96	96	96
Elizabeth River 1	37	90	95	91	91	88	88	84	88	88	88	88	88	88	88	88	88	88	88
Elizabeth River 2	80	82	91	91	67	91	91	84	88	88	88	88	88	88	88	88	88	88	88
Elizabeth River 3	77	75	84	91	91	91	67	84	88	88	88	88	88	88	88	88	88	88	88
South Anna 1	65	86	90	79	90	96	96	96	92	92	92	92	92	92	92	92	92	92	92
South Anna 2	67	71	84	94	92	96	90	96	93	93	93	93	93	93	93	93	93	93	93
Gravel Neck 1-2	98	98	95	66	66	65	-	-	-	-	-	-	-	-	-	-	-	-	-
Gravel Neck 3	86	72	91	97	97	97	92	97	91	96	91	96	96	96	96	96	96	96	96
Gravel Neck 4	87	71	87	97	97	97	97	96	96	96	96	96	96	96	96	96	96	96	96
Gravel Neck 5	88	78	88	97	97	97	93	96	96	96	96	96	96	96	96	96	96	96	96
Gravel Neck 6	88	76	89	97	97	97	97	96	96	96	96	96	96	96	96	96	96	96	96
Greensville	77	87	85	77	90	87	90	90	89	89	89	89	89	89	89	89	89	89	89
Hopewell	20	76	80	77	78	78	78	87	77	77	77	77	77	77	77	77	77	77	77
Ladysmith 1	92	85	88	91	93	93	93	93	92	92	92	92	92	92	92	92	92	92	92
Ladysmith 2	92	87	72	91	93	93	93	93	92	92	92	92	92	92	92	92	92	92	92
Ladysmith 3	92	90	89	91	92	92	92	93	92	92	92	92	92	92	92	92	92	92	92
Ladysmith 4	90	88	90	91	92	92	92	93	92	92	92	92	92	92	92	92	92	92	92
Ladysmith 5	77	80	89	91	92	92	92	93	92	92	92	92	92	92	92	92	92	92	92
Lowmoor CT 1-4	98	99	95	81	83	83	-	-	-	-	-	-	-	-	-	-	-	-	-
Mount Storm 1	76	59	59	76	87	85	87	85	82	82	82	82	82	82	82	82	82	82	82
Mount Storm 2	63	58	82	74	82	89	88	89	85	85	85	85	85	85	85	85	85	85	85
Mount Storm 3	58	65	62	72	84	91	89	91	87	87	87	87	87	87	87	87	87	87	87
Mount Storm CT	100	88	98	81	81	81	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuclear - Small Modular Reactor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95	95	95	95	95
New Combustion Turbine_ 1	-	-	-	-	-	-	-	-	92	92	92	92	92	92	92	92	92	92	92
New Combustion Turbine_ 2	-	-	-	-	-	-	-	-	92	92	92	92	92	92	92	92	92	92	92
New Combustion Turbine_Greenfield	-	-	-	-	-	-	-	-	-	-	100	100	100	100	100	92	92	92	92
North Anna 1	100	82	89	88	90	90	98	76	88	88	89	89	98	90	90	93	93	93	-
North Anna Unit 1 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93
North Anna 2	87	100	80	90	98	90	76	88	68	89	98	88	90	98	90	93	93	93	93
North Anna Unit 2 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Neck CT 1-4	89	93	70	80	80	80	-	-	-	-	-	-	-	-	-	-	-	-	-
Possum Point 6	87	66	68	81	80	88	88	88	83	83	83	83	83	83	83	83	83	83	83

230940070
230830115

Appendix 5C – Equivalent Availability Factor for Plan B

Company Name: Virginia Electric and Power Company

Schedule E

UNIT PERFORMANCE DATA

Equivalent Availability Factor (%)

	(ACTUAL)			(PROJECTED)															
Unit Name	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Possum Point CT 1-8	100	95	87	73	73	72	-	-	-	-	-	-	-	-	-	-	-	-	-
Remington 1	94	90	77	91	94	94	94	94	93	93	93	93	93	93	93	93	93	93	93
Remington 2	94	90	92	91	94	94	94	94	93	93	93	93	93	93	93	93	93	93	93
Remington 3	93	92	92	85	94	94	94	94	93	93	93	93	93	93	93	93	93	93	93
Remington 4	90	90	91	76	94	94	94	94	93	93	93	93	93	93	93	93	93	93	93
Rosemary	89	82	73	80	83	83	83	78	77	77	77	77	77	77	77	77	77	77	77
Southampton	78	77	78	79	78	80	80	90	79	79	79	79	79	79	79	79	79	79	79
Surry 1	100	90	85	98	89	90	98	88	88	98	79	90	-	-	-	-	-	-	-
Surry Unit 1 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	95	95	95	95	95	95	95
Surry 2	91	88	100	68	89	98	85	88	98	79	90	98	85	-	-	-	-	-	-
Surry Unit 2 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	95	95	95	95	95	95
Virginia City Hybrid Energy Center	69	69	63	83	82	83	83	83	80	80	80	80	80	80	80	80	80	80	80
Warren	81	70	74	84	79	81	84	84	80	80	80	80	80	80	80	80	80	80	80
Yorktown 3	80	73	68	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cox Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sinai Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Three Sisters Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dry Bridge Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dulles Tied Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cedar Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampton Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shands Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Battery_4H Hybrid (30MW) Post 2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Battery_4H Hybrid (30MW) Post 2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Battery_4H Hybrid (30MW) Post 2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

(1) Equivalent availability factor for intermittent resources shown as a capacity factor.

230940070
230830115

Appendix 5D – Net Capacity Factor

Company Name: Virginia Electric and Power Company

Schedule 9

UNIT PERFORMANCE DATA

Net Capacity Factor (%)

Unit Name	(ACTUAL) 2020	2021	2022	2023	(PROJECTED) 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Altavista	68	72	75	72.2	72.0	75.0	75.0	59.9	37.2	75.0	75.0	75.0	75.0	10.3	12.7	75.0	75.0	75.0	75.0
Bath County 1	20	21	16	16.1	19.5	18.6	18.9	19.4	18.7	14.6	13.1	12.3	10.8	11.3	11.0	10.7	10.8	11.3	12.0
Bath County 2	12	8	16	21.6	18.7	12.7	15.6	17.5	17.2	15.3	13.8	12.6	11.3	11.3	11.0	10.8	9.9	10.2	9.8
Bath County 3	9	13	19	15.8	19.9	18.5	12.8	18.5	18.6	16.9	14.7	13.4	12.1	12.1	11.8	11.3	11.2	11.9	12.6
Bath County 4	12	10	23	17.9	20.1	18.2	15.6	19.2	19.0	17.0	15.2	13.7	12.4	12.6	11.9	12.1	11.4	12.4	12.7
Bath County 5	14	11	21	22.3	14.5	18.6	17.6	19.6	19.1	17.6	15.3	14.0	12.7	12.7	12.3	12.2	11.6	12.9	13.2
Bath County 6	8	8	10	14.4	20.4	20.7	20.1	19.2	21.2	19.4	18.7	15.2	14.0	14.2	13.6	13.5	13.5	15.0	15.7
Bear Garden	78	57	44	70.5	71.3	68.9	84.9	83.1	79.2	74.2	71.6	72.1	74.7	68.3	69.9	72.1	76.2	78.8	79.4
Brunswick	82	72	60	53.6	80.6	77.5	82.7	82.3	77.2	76.2	75.8	76.6	77.6	74.9	74.7	75.9	77.6	77.8	77.8
Existing VA Solar PPAS 2020	-	-	-	25.4	25.4	25.4	25.5	25.4	25.4	25.4	25.5	25.4	25.4	25.4	25.5	25.4	25.4	25.4	25.5
BTM Unit 1	N/A	N/A	N/A	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BTM Unit 2	N/A	N/A	N/A	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
BTM Unit 3	78	77	71	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grassfield Solar	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Norge Solar	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Cavalier PPA	-	-	-	-	-	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3
Chesapeake PPA	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Pleasant Hill PPA	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Rivanna PPA	-	-	-	-	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8
Wattington PPA	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Wythe 2 PPA	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Sycamore Solar	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Black Bear Distributed	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Clean Energy 2 DER 2	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Clean Energy 2 DER 3	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Springfield Distributed	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
360 PPA	-	-	-	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Cox PPA	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Ho Fel PPA	-	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Sinai PPA	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Stratford PPA	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Surry PPA	-	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Camellia Solar	-	-	-	-	20.1	20.2	20.2	20.2	20.1	20.2	20.2	20.2	20.1	20.2	20.2	20.2	20.1	20.2	20.2
Dulles Tied Solar	-	-	-	-	-	-	19.8	19.8	19.7	19.8	19.8	19.8	19.7	19.8	19.8	19.8	19.7	19.8	19.8
Fountain Creek Solar	-	-	-	-	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1
Otter Creek Solar	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Piney Creek Base Solar	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Quillwort Solar	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Sebera Solar	-	-	-	-	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
Goldsago Solar	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Sweet Sue Solar	-	-	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Walnut Solar	-	-	-	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Winterberry Solar	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Winterpock Solar	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Augusta PPA	-	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Clean Energy 3 DER 1	-	-	-	-	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
Clean Energy 3 DER 2	-	-	-	-	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Pivot Energy VA 2	-	-	-	-	-	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Groves PPA	-	-	-	-	-	-	-	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
Harrisonburg PPA	-	-	-	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Jarratt PPA	-	-	-	-	-	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
Switchgrass PPA	-	-	-	-	-	20.8	20.8	20.8	20.9	20.8	20.8	20.8	20.9	20.8	20.8	20.8	20.9	20.8	20.8
Brideton Solar	-	-	-	-	-	-	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
Chesapeake CT 1, 4, 6	0	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 5	21	18	16	36.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 6	17	10	19	32.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 7	69	56	56	72.4	69.0	89.2	90.1	82.8	85.5	85.8	86.0	86.5	86.6	85.3	84.8	85.8	86.6	86.4	86.4
Chesterfield 8	39	61	57	72.9	82.5	89.0	90.3	82.7	85.5	84.8	84.8	86.3	86.0	83.1	83.1	84.5	86.3	86.6	86.8
Clover 1	17	11	8	24.8	19.3	18.1	13.8	14.0	18.4	14.0	15.6	19.5	21.3	21.5	25.1	31.4	28.5	25.0	25.9
Clover 2	18	12	8	26.6	20.2	18.1	17.1	16.4	19.3	15.9	18.9	22.3	25.0	24.8	30.3	35.4	33.6	31.4	34.3
Darbytown 1	1	1	1	5.0	0.9	2.7	4.1	2.5	2.1	1.9	1.7	1.7	1.7	1.8	1.7	1.8	1.9	1.7	1.8
Darbytown 2	4	1	2	5.0	0.8	2.6	4.1	2.5	2.0	1.9	1.6	1.6	1.6	1.7	1.7	1.9	1.8	1.7	1.6

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Appendix 5D – Net Capacity Factor

Company Name: Virginia Electric and Power Company

UNIT PERFORMANCE DATA

Net Capacity Factor (%)

Schedule 9

Unit Name	(ACTUAL) 2020	2021	2022	2023	(PROJECTED) 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Darbytown 3	3	3	1	5.0	0.9	2.7	4.1	2.5	2.0	1.9	1.6	1.7	1.6	1.7	1.7	1.7	1.8	1.7	1.8
Darbytown 4	7	2	3	5.0	0.8	2.8	4.0	2.4	2.0	1.9	1.6	1.6	1.6	1.7	1.6	1.7	1.8	1.8	1.8
Elizabeth River 1	1	1	1	3.0	1.2	2.5	3.0	2.1	1.5	1.4	1.3	1.3	1.2	1.2	1.3	1.4	1.4	1.2	1.3
Elizabeth River 2	1	3	4	3.0	1.1	2.4	3.0	2.2	1.4	1.4	1.2	1.3	1.2	1.2	1.3	1.3	1.4	1.2	1.2
Elizabeth River 3	7	1	1	3.0	1.2	2.6	3.0	2.2	1.5	1.4	1.2	1.3	1.2	1.2	1.3	1.4	1.4	1.2	1.2
South Anna 1	60	59	58	58.6	46.2	57.1	74.2	62.7	53.2	51.8	44.5	43.3	45.6	41.6	43.6	46.5	52.7	60.5	66.3
South Anna 2	82	48	49	69.1	46.3	55.3	67.8	60.6	50.6	48.4	41.3	40.7	42.2	37.8	39.6	43.3	49.2	58.0	64.0
Gravel Neck 1-2	0	0	1	0.3	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gravel Neck 3	2	2	2	2.4	0.7	2.2	3.3	2.0	1.2	1.2	1.2	1.2	1.2	1.0	1.1	1.1	1.2	1.1	1.2
Gravel Neck 4	4	0	1	2.4	0.7	2.2	3.3	2.0	1.2	1.2	1.2	1.2	1.2	1.0	1.1	1.1	1.2	1.1	1.2
Gravel Neck 5	6	1	1	2.5	0.7	2.2	3.3	2.0	1.2	1.3	1.2	1.2	1.1	1.1	1.1	1.2	1.2	1.1	1.2
Gravel Neck 6	7	0	1	2.3	0.7	2.2	3.3	1.9	1.2	1.1	1.2	1.1	1.1	1.0	1.1	1.1	1.2	1.1	1.2
Greensville	77	83	80	74.1	86.9	84.6	87.9	88.0	86.0	86.0	86.0	85.9	85.9	85.9	85.9	85.9	86.0	85.9	85.9
Hopewell	17	69	80	75.0	64.0	76.0	75.0	51.8	28.3	74.6	74.6	74.6	74.6	6.3	9.1	74.6	74.6	74.6	74.6
Ladysmith 1	11	6	11	5.0	5.0	5.0	5.0	5.0	5.0	4.2	3.2	3.3	3.0	3.0	3.5	3.6	3.7	5.0	5.0
Ladysmith 2	18	7	14	5.0	5.0	5.0	5.0	5.0	5.0	4.3	3.3	3.4	3.1	3.0	3.5	3.7	3.8	5.0	5.0
Ladysmith 3	20	5	10	5.0	5.0	5.0	5.0	5.0	5.0	4.5	3.5	3.6	3.4	3.3	3.7	3.8	4.0	5.0	5.0
Ladysmith 4	24	10	18	23.3	13.0	15.3	18.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Ladysmith 5	10	7	11	35.0	13.1	15.8	21.8	14.4	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	15.7
Lowmoor CT 1-4	0	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mount Storm 1	47	35	30	37.1	31.1	38.2	42.0	28.9	28.3	26.3	27.2	31.4	35.4	35.9	42.0	49.0	47.1	47.7	48.7
Mount Storm 2	29	38	36	38.8	33.0	41.5	43.3	30.9	29.7	27.2	29.9	34.7	39.9	40.1	46.6	53.9	50.3	51.4	52.2
Mount Storm 3	23	44	32	36.3	35.9	44.8	46.8	33.9	31.3	29.8	30.6	35.4	40.3	40.5	47.0	54.3	53.9	55.1	56.4
Mount Storm CT	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuclear - Small Modular Reactor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90.6	90.6	90.6	90.6	90.6
New Combustion Turbine_ 1	-	-	-	-	-	-	-	-	13.8	12.0	8.0	8.1	8.2	7.0	8.1	9.3	12.2	16.0	19.2
New Combustion Turbine_ 2	-	-	-	-	-	-	-	-	13.2	10.8	7.4	7.4	7.6	6.4	7.4	8.6	11.3	14.0	18.1
New Combustion Turbine_Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.9	9.2	11.8	15.2
North Anna 1	102	83	80	96.3	88.7	88.2	86.3	75.1	86.1	96.3	87.0	87.1	98.3	88.1	88.2	91.4	91.4	91.4	-
North Anna Unit 1 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91.4
North Anna 2	88	102	82	88.3	98.4	88.2	74.8	98.4	88.1	87.2	96.4	88.8	88.3	96.4	88.1	91.2	91.2	91.2	91.2
North Anna Unit 2 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Neck CT 1-4	2	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Possum Point 6	74	46	35	65.5	56.8	65.9	76.8	72.7	63.2	61.2	58.3	56.3	58.8	54.5	56.1	58.0	63.0	67.1	69.4
Possum Point CT 1-6	0	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remington 1	16	12	15	5.0	5.0	5.0	5.0	5.0	4.5	3.1	2.6	2.3	2.4	2.5	2.5	2.7	2.9	3.5	5.0
Remington 2	12	6	11	5.0	5.0	5.0	5.0	5.0	4.2	2.8	2.6	2.3	2.4	2.4	2.6	2.7	2.9	3.6	4.3
Remington 3	14	11	16	15.4	6.3	8.6	11.6	7.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0	6.4
Remington 4	10	8	11	23.1	5.8	9.1	16.4	11.0	7.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.7	7.2
Rosemary	0	1	0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Southampton	61	71	75	75.0	65.2	75.0	75.0	56.8	32.4	75.0	75.0	75.0	75.0	7.3	10.6	75.0	75.0	75.0	75.0
Surry 1	102	90	87	95.9	87.5	87.6	95.9	86.7	86.3	95.9	77.7	87.6	-	-	-	-	-	-	-
Surry Unit 1 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	93.0	93.0	93.0	93.0	93.0	93.0	93.0
Surry 2	92	89	102	86.7	87.1	95.9	83.8	86.3	95.9	77.7	87.6	95.9	83.5	-	-	-	-	-	-
Surry Unit 2 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	93.0	93.0	93.0	93.0	93.0	93.0
Virginia City Hybrid Energy Center	16	18	28	29.5	24.5	27.1	24.1	18.8	19.7	14.9	13.0	18.4	17.5	17.7	21.2	28.0	23.1	24.6	26.0
Warren	78	60	65	80.9	75.7	78.2	80.7	80.5	76.9	75.5	75.6	75.9	75.5	73.1	73.0	74.2	75.2	75.9	76.1
Yorktown 3	1	1	0	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cox Storage	-	-	-	-	13.7	13.4	13.8	14.6	14.8	14.4	14.6	14.9	16.0	15.2	15.3	15.2	15.4	15.5	15.3
Sinai Storage	-	-	-	-	13.7	13.4	13.8	14.6	14.7	14.8	14.7	15.0	15.1	15.1	15.3	15.5	15.4	16.7	15.4
Three Sisters Storage	-	-	-	-	-	16.5	16.3	16.4	16.5	16.2	16.2	16.1	16.2	16.0	16.0	16.0	16.0	15.9	15.5
Dry Bridge Storage	-	-	-	16.4	15.8	16.2	15.8	15.9	16.1	15.6	15.3	14.7	14.9	14.4	14.0	13.7	13.6	13.4	12.6
Dulles Thd Storage	-	-	-	-	-	-	7.0	8.1	8.3	7.9	7.7	8.2	8.6	9.2	9.0	9.2	9.5	9.9	9.5
Cedar Storage	-	-	-	-	-	16.2	15.9	16.1	16.3	15.8	15.8	15.8	15.8	15.5	15.2	15.3	14.8	14.1	13.0
Hampton Storage	-	-	-	-	-	16.2	15.9	16.1	16.3	15.8	15.8	15.8	15.8	15.5	15.2	15.2	14.8	14.1	13.0
Shands Storage	-	-	-	-	-	-	15.8	15.9	16.1	15.6	15.2	14.7	14.9	14.4	14.0	13.7	13.6	13.4	12.6
Battery_4H Hybrid (30MW) Post 2027	-	-	-	-	-	-	-	-	-	-	15.6	15.4	15.5	15.1	14.8	14.8	14.9	14.9	14.1
Battery_4H Hybrid (30MW) Post 2028	-	-	-	-	-	-	-	-	16.3	15.8	15.5	15.1	15.3	14.7	14.4	14.2	14.3	14.0	13.1
Battery_4H Hybrid (30MW) Post 2029	-	-	-	-	-	-	-	-	-	15.8	15.6	15.2	15.4	14.9	14.5	14.5	14.5	14.2	13.3

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Appendix 5E – Heat Rates

Company Name: Virginia Electric and Power Company

Schedule 1

UNIT PERFORMANCE DATA

Average Heat Rate - (mmBtu/MWh)

	(ACTUAL)				(PROJECTED)														
Unit Name	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Altavista	15.81	16.39	16.56	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03
Bath County 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bear Garden	7.19	7.31	7.27	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08
Brunswick	6.97	7.04	7.02	6.87	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86
BTM Unit 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTM Unit 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTM Unit 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesapeake CT 1, 4, 6	15.99	18.18	16.45	14.95	14.95	14.95	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 5	10.46	10.36	10.30	9.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 6	10.40	10.25	10.18	10.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 7	7.39	7.69	7.76	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
Chesterfield 8	7.36	7.36	7.73	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25
Clover 1	10.91	11.46	11.16	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49
Clover 2	10.27	11.20	10.97	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40
Darbytown 1	12.91	13.28	12.58	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26
Darbytown 2	12.47	12.89	12.49	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26
Darbytown 3	12.54	12.90	12.44	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26
Darbytown 4	12.64	12.88	12.74	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26
Elizabeth River 1	12.50	12.55	12.32	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22
Elizabeth River 2	12.66	12.63	12.99	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22
Elizabeth River 3	12.35	12.16	12.21	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22
South Anna 1	8.29	8.14	8.63	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48
South Anna 2	8.44	8.36	8.35	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49	8.49
Gravel Neck 1-2	18.20	19.24	15.72	17.08	17.08	17.08	-	-	-	-	-	-	-	-	-	-	-	-	-
Gravel Neck 3	12.95	13.14	12.99	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86
Gravel Neck 4	13.12	13.21	12.76	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86
Gravel Neck 5	13.40	13.60	13.53	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86
Gravel Neck 6	12.92	13.09	13.26	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86
Greensville	6.60	6.72	6.51	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61
Hopewell	18.22	17.39	16.53	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88	11.88
Ladysmith 1	9.84	10.90	10.06	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32
Ladysmith 2	8.59	10.67	9.71	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30
Ladysmith 3	9.70	10.16	9.67	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27
Ladysmith 4	9.62	10.18	9.90	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27	10.27
Ladysmith 5	9.65	10.00	9.55	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28	10.28
Lowmoor CT 1-4	18.92	17.24	18.00	15.98	15.98	15.98	-	-	-	-	-	-	-	-	-	-	-	-	-
Mount Storm 1	10.41	10.32	10.49	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73	9.73
Mount Storm 2	10.20	10.31	10.51	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69	9.69
Mount Storm 3	11.08	9.83	10.94	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54
Mount Storm CT	15.37	13.99	14.68	14.68	14.68	14.68	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuclear - Small Modular Reactor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.72	11.72	11.72	11.72	11.72
New Combustion Turbine_ 1	-	-	-	-	-	-	-	-	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63
New Combustion Turbine_ 2	-	-	-	-	-	-	-	-	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63
New Combustion Turbine_Greenfield	-	-	-	-	-	-	-	-	-	-	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63
North Anna 1	10.39	10.40	10.35	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	-
North Anna Unit 1 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.40
North Anna 2	10.34	10.35	10.38	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42
North Anna Unit 2 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Neck CT 1-4	18.56	17.05	16.72	17.58	17.58	17.58	-	-	-	-	-	-	-	-	-	-	-	-	-
Possum Point 6	-	-	-	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77
Possum Point CT 1-6	7.15	7.15	7.50	16.21	16.21	16.21	-	-	-	-	-	-	-	-	-	-	-	-	-
Remington 1	9.87	10.06	9.70	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51	10.51
Remington 2	9.86	10.32	10.33	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52	10.52
Remington 3	9.72	10.22	10.33	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.47
Remington 4	9.97	10.42	10.42	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54	10.54
Rosemary	10.22	9.74	11.28	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76
Southampton	16.95	17.47	17.08	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19	11.19

230620067

Appendix 5E – Heat Rates

Company Name: Virginia Electric and Power Company

Schedule 1I

UNIT PERFORMANCE DATA

Average Heat Rate - (mmBtu/MWh)

	(ACTUAL)				(PROJECTED)														
Unit Name	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Surry 1	10.33	10.32	10.29	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	-	-	-	-	-	-	-
Surry Unit 1 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	10.31	10.31	10.31	10.31	10.31	10.31	10.31
Surry 2	10.25	10.23	10.30	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	-	-	-	-	-	-
Surry Unit 2 Nuclear Extension	-	-	-	-	-	-	-	-	-	-	-	-	-	10.31	10.31	10.31	10.31	10.31	10.31
Virginia City Hybrid Energy Center	12.47	10.98	10.46	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98	9.98
Warren	6.88	6.89	6.90	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08	7.08
Yorktown 3	10.91	11.11	10.21	9.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cox Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sinai Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Three Sisters Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dry Bridge Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dulles Tied Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cedar Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampton Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shands Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Battery_4H Hybrid (30MW) Post 2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Battery_4H Hybrid (30MW) Post 2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Battery_4H Hybrid (30MW) Post 2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix 5F – Existing Capacity (for Plan B)

Company Name: Virginia Electric and Power Company

CAPACITY DATA

Schedule 7

	(ACTUAL)				(PROJECTED)														
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
I. Firm Capacity (MW)[1][4]																			
a. Nuclear[5]	3,357	3,357	3,357	3,348	3,349	3,349	3,349	3,349	3,349	3,349	3,349	3,349	3,349	3,349	3,349	3,349	3,349	3,349	3,349
b. Biomass[3]	153	153	153	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214
c. Coal	3,684	3,684	3,680	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604	2,604
d. Heavy Fuel Oil	788	787	787	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
e. Light Fuel Oil	584	584	584	245	245	-	-	-	-	-	-	-	-	-	-	-	-	-	-
f. Natural Gas-Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
g. Natural Gas-Combined Cycle	6,293	6,268	6,266	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313	6,313
h. Natural Gas-Turbine	2,051	2,051	2,051	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391	2,391
i. Hydro-Conventional	317	317	317	316	316	316	316	316	316	316	316	316	316	316	316	316	316	316	316
j. Pumped Storage & Battery	1,809	1,809	1,809	1,840	1,840	1,840	1,840	1,840	1,840	1,839	1,839	1,838	1,838	1,837	1,837	1,836	1,836	1,835	1,835
k. Renewable	72	128	224	720	1,112	1,128	1,048	970	807	711	655	567	492	475	456	441	432	424	416
l. Total Company Firm Capacity	19,109	19,137	19,228	17,992	18,384	18,155	18,075	17,997	17,634	17,737	17,681	17,593	17,517	17,500	17,483	17,485	17,455	17,447	17,438
m. Other (PPA)	-	-	64	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224
n. Storage PPA	-	-	-	-	11	10	10	11	12	12	13	13	13	13	13	12	12	12	12
o. Renewable PPA	-	-	-	70	166	167	163	160	153	149	147	143	140	139	138	138	137	137	137
p. Total	19,109	19,137	19,293	18,286	18,784	18,556	18,472	18,392	18,223	18,122	18,064	17,972	17,894	17,875	17,857	17,839	17,828	17,819	17,810
II. Firm Capacity Mix (%)[2]																			
a. Nuclear	17.6%	17.5%	17.4%	18.3%	17.8%	18.0%	18.1%	18.2%	18.4%	18.5%	18.5%	18.6%	18.7%	18.7%	18.8%	18.8%	18.8%	18.8%	18.8%
b. Biomass(3)	0.8%	0.8%	0.8%	1.2%	1.1%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
c. Coal	19.3%	19.3%	19.1%	14.2%	13.9%	14.0%	14.1%	14.2%	14.3%	14.4%	14.4%	14.5%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%
d. Heavy Fuel Oil	4.1%	4.1%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
e. Light Fuel Oil	3.1%	3.1%	3.0%	1.3%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
f. Natural Gas-Boiler	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
g. Natural Gas-Combined Cycle	32.9%	32.7%	32.5%	34.5%	33.6%	34.0%	34.2%	34.3%	34.6%	34.8%	34.9%	35.1%	35.3%	35.3%	35.4%	35.4%	35.4%	35.4%	35.4%
h. Natural Gas-Turbine	10.7%	10.7%	10.6%	13.1%	12.7%	12.9%	12.9%	13.0%	13.1%	13.2%	13.2%	13.3%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%
i. Hydro-Conventional	1.7%	1.7%	1.6%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
j. Pumped Storage & Battery	9.5%	9.5%	9.4%	10.1%	9.8%	9.9%	10.0%	10.0%	10.1%	10.1%	10.2%	10.2%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%
k. Renewable	0.4%	0.7%	1.2%	3.9%	5.9%	6.1%	5.7%	5.3%	4.4%	3.9%	3.6%	3.2%	2.6%	2.7%	2.6%	2.5%	2.4%	2.4%	2.3%
l. Total Company Firm Capacity	100.0%	100.0%	99.7%	98.4%	97.9%	97.8%	97.9%	97.9%	97.9%	97.8%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%
m. Other (PPA)	0.0%	0.0%	0.3%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%
n. Storage PPA	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
o. Renewable PPA	0.0%	0.0%	0.0%	0.4%	0.9%	0.9%	0.9%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
p. Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(1) Net dependable annual firm capability during peak season.

(2) Each item in Section I as a percent of line "p." (Total).

(3) Includes current estimates for renewable capacity by VCHEC.

(4) Firm capacity as of model date 2024.

(5) Including nuclear extensions.

Case No. PUR-2023-00066
2023 Integrated Resource Plan
Appendix 5F (rev. Aug. 17, 2023)

230940070
230830115

Appendix 5G – Energy Generation by Type (GWh) for Plan B

Company Name: Virginia Electric and Power Company

Schedule 2

GENERATION

	(ACTUAL)				(PROJECTED)														
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
I. System Output (GWh)																			
a. Nuclear	28,287	26,788	26,542	27,993	27,483	27,438	26,757	28,251	27,091	27,217	26,571	27,253	27,592	28,231	29,742	30,217	32,435	32,344	34,472
b. Biomass[1]	788	1,055	1,135	1,207	1,084	1,207	1,191	894	575	1,138	1,128	1,147	1,158	210	269	1,199	1,187	1,191	1,189
c. Coal	7,720	7,693	7,812	9,083	6,769	7,947	8,100	5,877	5,948	5,241	5,504	6,465	7,311	7,335	8,601	10,090	9,557	9,672	9,967
d. Heavy Fuel Oil	78	49	31	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
e. Light Fuel Oil	38	130	271	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
f. Natural Gas-Boiler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
g. Natural Gas-Combined Cycle	40,819	35,685	33,087	40,585	45,317	45,529	48,878	48,014	45,520	44,929	44,293	44,501	45,027	43,439	43,626	44,303	45,474	46,046	46,355
h. Natural Gas-Turbine	2,167	997	1,537	2,316	1,120	1,437	1,804	1,360	2,404	2,086	1,675	1,674	1,681	1,559	1,683	2,175	2,944	4,074	5,710
i. Hydro-Conventional	778	661	363	627	628	627	627	627	629	627	627	627	629	627	627	627	628	627	627
j. Pumped Storage & Battery	2,005	1,854	2,772	2,806	3,046	2,891	2,820	3,165	3,213	3,021	2,826	2,765	2,738	2,938	3,046	3,241	3,459	3,843	4,039
k. Renewable	412	804	788	1,312	1,885	2,102	3,058	13,340	15,096	15,904	16,842	18,283	19,693	30,322	31,744	32,968	34,205	35,579	38,782
l. Total Generation	83,091	75,917	74,137	86,193	87,333	89,176	93,234	99,629	100,477	100,183	99,487	102,715	105,725	114,680	119,339	124,816	129,990	133,379	139,154
m. Purchased Power (PPAs)	2,314	2,711	2,718	1,875	2,344	3,178	3,171	3,740	4,209	4,664	5,170	5,838	6,522	7,166	7,826	8,483	9,162	9,787	10,435
n. Purchased Power (Battery Storage)	-	-	-	-	16	114	108	108	153	206	276	356	445	543	639	761	903	1,034	1,108
o. Purchased Power (Market / PJM)	3,946	12,747	19,846	13,545	13,829	12,661	14,448	12,771	13,935	16,193	20,495	21,103	23,491	20,009	21,662	23,275	26,037	29,958	33,076
p. Less Pumping Energy	(2,464)	(2,369)	(3,446)	(3,634)	(3,818)	(3,724)	(3,646)	(4,082)	(4,166)	(3,967)	(3,799)	(3,813)	(3,849)	(4,175)	(4,428)	(4,788)	(5,217)	(5,600)	(6,121)
q. Less Other Sales[2]	-	-	-	(2,983)	(818)	(1,200)	(1,116)	(2,735)	(1,300)	(570)	(493)	(508)	(621)	(1,085)	(1,250)	(1,397)	(1,442)	(1,283)	(1,225)
s. Total System Firm Energy Req.	86,887	89,006	93,258	94,998	98,686	100,205	106,193	109,451	113,308	118,689	121,115	125,692	131,712	137,118	143,789	151,151	159,434	167,093	176,427
II. Energy Supplied by Competitive Service Providers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(1) Includes current estimates for renewable energy generation by VCHEC.

(2) Include all sales or delivery transactions with other electric utilities, i.e., firm or economy sales, etc.

Case No. PUR-2023-00066
2023 Integrated Resource Plan
Appendix 5G (rev. Aug. 17, 2023)

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Appendix 5H – Energy Generation by Type (%) for Plan E

Company Name: Virginia Electric and Power Company

GENERATION

Schedule 3

	(ACTUAL)				(PROJECTED)														
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
III. System Output Mix (%)																			
a. Nuclear	32.6%	30.1%	28.5%	29.5%	27.8%	27.4%	25.2%	24.0%	23.9%	23.3%	21.9%	21.7%	20.9%	20.6%	20.7%	20.0%	20.3%	19.4%	18.5%
b. Biomass(1)	0.9%	1.2%	1.2%	1.3%	1.1%	1.2%	1.1%	0.8%	0.5%	1.0%	0.9%	0.9%	0.9%	0.2%	0.2%	0.6%	0.7%	0.7%	0.7%
c. Coal	8.9%	8.9%	8.2%	9.5%	8.6%	7.9%	7.6%	5.5%	5.2%	4.5%	4.5%	5.1%	5.6%	5.3%	6.0%	6.7%	6.0%	5.6%	5.6%
d. Heavy Fuel Oil	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
e. Light Fuel Oil	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
f. Natural Gas-Boiler	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
g. Natural Gas-Combined Cycle	47.0%	40.1%	35.5%	42.6%	45.8%	45.4%	46.0%	43.9%	40.2%	38.5%	38.8%	35.4%	34.2%	31.7%	30.3%	29.3%	28.5%	27.6%	26.3%
h. Natural Gas-Turbine	2.5%	1.1%	1.6%	2.4%	1.1%	1.4%	1.7%	1.2%	2.1%	1.8%	1.4%	1.3%	1.3%	1.1%	1.2%	1.4%	1.6%	2.4%	3.2%
i. Hydro-Conventional	0.9%	0.7%	0.4%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%
j. Pumped Storage & Battery	2.3%	2.1%	3.0%	3.1%	3.1%	2.9%	2.7%	2.9%	2.6%	2.6%	2.3%	2.2%	2.1%	2.1%	2.1%	2.1%	2.2%	2.3%	2.3%
k. Renewable	0.5%	0.9%	0.8%	1.4%	1.9%	2.1%	2.9%	12.2%	13.3%	13.6%	13.9%	14.5%	14.9%	22.1%	22.1%	21.8%	21.5%	21.3%	20.8%
l. Total Generation	95.6%	85.3%	79.5%	90.7%	88.3%	89.0%	87.8%	91.0%	88.7%	85.8%	82.1%	81.7%	80.3%	83.6%	83.0%	82.8%	81.5%	79.8%	78.9%
m. Purchased Power (PPAs)	2.7%	3.0%	2.9%	2.0%	2.4%	3.2%	3.0%	3.4%	3.7%	4.0%	4.3%	4.6%	5.0%	5.2%	5.4%	5.6%	5.7%	5.9%	5.9%
n. Purchased Power (Battery Storage)	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.3%	0.3%	0.4%	0.4%	0.5%	0.6%	0.6%	0.6%
o. Purchased Power (Market / PJM)	4.5%	14.3%	21.3%	14.3%	14.0%	12.6%	13.6%	11.7%	12.3%	13.9%	16.0%	16.6%	17.6%	14.6%	15.1%	15.4%	16.3%	17.9%	18.7%
p. Less Pumping Energy	-2.6%	-2.7%	-3.7%	-3.6%	-3.9%	-3.7%	-3.4%	-3.7%	-3.7%	-3.4%	-3.1%	-3.0%	-2.9%	-3.0%	-3.1%	-3.2%	-3.3%	-3.5%	-3.5%
q. Less Other Sales(2)	0.0%	0.0%	0.0%	-3.1%	-0.8%	-1.2%	-1.1%	-2.5%	-1.1%	-0.5%	-0.4%	-0.4%	-0.5%	-0.6%	-0.9%	-0.9%	-0.9%	-0.8%	-0.7%
r. Total System Firm Energy Req.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
IV. System Load Factor	58.7%	60.0%	58.5%	63.8%	65.2%	65.9%	67.3%	68.1%	68.8%	69.8%	70.5%	71.3%	72.3%	73.1%	73.8%	74.7%	75.4%	76.1%	76.9%

(1) Includes current estimates for renewable energy generation by VCHEC.

(2) Include all sales or delivery transactions with other electric utilities, i.e., firm or economy sales, etc.

Case No. PUR-2023-00066
2023 Integrated Resource Plan
Appendix 5H (rev. Aug. 17, 2023)

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Appendix 5I - Solar and Wind Generating Facilities Since July 1, 2018

Project Name	Status	Nameplate (MWac)	In Service Date	Type	Cost Recovery Mechanism
Hollyfield Solar	Operational	17	2018	Company-build	Ring-Fence
Montross Solar	Operational	20	2018	Company-build	Ring-Fence
Pecan Solar	Operational	74.9	2018	Company-build	Ring-Fence
Puller Solar	Operational	15	2018	Company-build	Ring-Fence
Colonial Trail West Solar	Operational	142	2019	Company-build	RAC
Gloucester Solar	Operational	20	2019	Company-build	Ring-Fence
Gutenberg Solar	Operational	80	2019	Company-build	Ring-Fence
Chestnut Solar	Operational	75	2020	Company-build	Ring-Fence
Coastal VA Offshore Wind (CVOW) Demonstration	Operational	12	2020	Company-build	Fuel / Base
Grasshopper Solar	Operational	80	2020	Company-build	Ring-Fence
Spring Grove 1 Solar	Operational	98	2020	Company-build	RAC
Hickory Solar*	Operational	32	2020	PPA	Fuel / Base
Pamplin Solar*	Operational	15.7	2020	PPA	Fuel / Base
Rives Road Solar*	Operational	20	2020	PPA	Fuel / Base
Bedford Solar	Operational	70	2021	Company-build	Ring-Fence
Belcher Solar	Operational	88	2021	Company-build	Ring-Fence
Rochambeau Solar	Operational	20	2021	Company-build	Ring-Fence
Sadler Solar	Operational	100	2021	Company-build	RAC
Buckingham Solar II*	Operational	20	2021	PPA	Fuel / Base
Hollyfield Solar II*	Operational	13	2021	PPA	Fuel / Base
Mount Jackson Solar I*	Operational	15.65	2021	PPA	Fuel / Base
Water Strider Solar	Operational	80	2021	PPA	Fuel / Base
Westmoreland Solar	Operational	20	2021	PPA	Fuel / Base
Acorn Solar	Operational	1.4	2022	Company-build	Ring-Fence
Fort Powhatan Solar	Operational	150	2022	Company-build	Ring-Fence
Grassfield Solar	Operational	20	2022	Company-build	RAC
Maplewood Solar	Operational	120	2022	Company-build	Ring-Fence
Pumpkinseed Solar	Operational	59.6	2022	Company-build	Ring-Fence
Nokesville Solar*	Operational	20	2022	PPA	Fuel / Base
Sycamore Solar	Operational	42.0	2023	Company-build	RAC
Ivy Landfill Distributed	Under Construction	3.0	2025 (proj.)	Company-build	RAC
Black Bear Distributed	Under Construction	1.6	2023 (proj.)	Company-build	RAC
Bookers Mill Solar	Under Construction	127.0	2023 (proj.)	Company-build	Ring-Fence
Camellia Solar	Under Construction	20.0	2023 (proj.)	Company-build	RAC
Fountain Creek Solar	Under Construction	80.0	2023 (proj.)	Company-build	RAC
Norge Solar	Under Construction	20.0	2023 (proj.)	Company-build	RAC
Otter Creek Solar	Under Construction	60.0	2023 (proj.)	Company-build	RAC
Piney Creek Solar	Under Construction	80.0	2023 (proj.)	Company-build	RAC
Quillwort Solar	Under Construction	18.0	2023 (proj.)	Company-build	RAC
Sebera Solar	Under Construction	18.0	2023 (proj.)	Company-build	RAC
Solidago Solar	Under Construction	20.0	2023 (proj.)	Company-build	RAC
Springfield Distributed	Under Construction	2.0	2023 (proj.)	Company-build	RAC
Sweet Sue Solar	Under Construction	73.0	2023 (proj.)	Company-build	RAC
Winterberry Solar	Under Construction	20.0	2023 (proj.)	Company-build	RAC
Winterpock Solar	Under Construction	20.0	2023 (proj.)	Company-build	RAC
Aditya Solar*	Under Construction	11	2023 (proj.)	PPA	Fuel / Base
Chesapeake Solar	Under Construction	118	2023 (proj.)	PPA	RAC
Endless Caverns Solar*	Under Construction	31.4	2023 (proj.)	PPA	Fuel / Base
Pleasant Hill Solar	Under Construction	20	2023 (proj.)	PPA	RAC
Stratford Solar	Under Construction	15	2023 (proj.)	PPA	RAC
Watlington Solar	Under Construction	20	2023 (proj.)	PPA	RAC
Bridleton Solar	Under Construction	20.0	2024 (proj.)	Company-build	RAC
Kings Creek Solar	Under Construction	20.0	2024 (proj.)	Company-build	RAC
North Ridge Solar	Under Construction	20.0	2024 (proj.)	Company-build	RAC
Racefield Distributed	Under Construction	3.0	2024 (proj.)	Company-build	RAC
Southern Virginia Solar	Under Construction	125.0	2024 (proj.)	Company-build	RAC
Walnut Solar	Under Construction	149.9	2024 (proj.)	Company-build	RAC
Augusta Solar	Under Construction	105	2024 (proj.)	PPA	RAC
Cox Solar	Under Construction	16	2024 (proj.)	PPA	RAC
Sinai Solar	Under Construction	9.9	2024 (proj.)	PPA	RAC
Ho-Fel Solar	Under Construction	50	2024 (proj.)	PPA	RAC
Jarratt Solar	Under Construction	48.4	2024 (proj.)	PPA	RAC
New Kent Solar*	Under Construction	20	2024 (proj.)	PPA	Fuel / Base
Rivanna Solar	Under Construction	12.5	2024 (proj.)	PPA	RAC

Appendix 5I - Solar and Wind Generating Facilities Since July 1, 2018

Project Name	Status	Nameplate (MWac)	In Service Date	Type	Cost Recovery Mechanism
Surry Solar	Under Construction	20	2024 (proj.)	PPA	RAC
Switchgrass Solar	Under Construction	69	2024 (proj.)	PPA	RAC
Wythe Solar	Under Construction	75	2024 (proj.)	PPA	RAC
Dulles Solar	Under Construction	100.0	2025 (proj)	Company-build	RAC
Cavalier Solar	Under Construction	240	2025 (proj)	PPA	RAC
Cerulean Solar	Under Construction	62.0	2026 (proj.)	Company-build	RAC
Coastal VA Offshore Wind (CVOW)	Under Construction	2587	2026 (proj.)	Company-build	RAC
Courthouse Solar	Under Construction	167.0	2026 (proj.)	Company-build	RAC
Moon Corner Solar	Under Construction	60.0	2026 (proj.)	Company-build	RAC
360 Solar 1 Solar	Under Construction	26	2026 (proj.)	PPA	RAC
360 Solar 2 Solar	Under Construction	26	2026 (proj.)	PPA	RAC
Groves Solar	Under Construction	16.2	2026 (proj.)	PPA	RAC
Harrisonburg Solar	Under Construction	15	2026 (proj.)	PPA	RAC

* Variable pricing based on PJM energy and capacity prices.

230404073

Appendix 5J - Potential Unit Retirements for Plan B

Company Name: Virginia Electric and Power Company

Schedule 19

UNIT PERFORMANCE DATA

Planned Unit Retirements[1]

Unit Name	Location	Unit Type	Primary Fuel Type	Projected Retirement Year	MW Summer	MW Winter
Yorktown 3	Yorktown, VA	Steam-Cycle	Heavy Fuel Oil	2023	767	792
Chesterfield 5	Chester, VA	Steam-Cycle	Coal	2023	336	342
Chesterfield 6	Chester, VA	Steam-Cycle	Coal	2023	678	690
Chesapeake CT 1	Chesapeake, VA	CombustionTurbine	Light Fuel Oil	2025	39	53
Chesapeake GT1					15	
Chesapeake GT4					12	
Chesapeake GT6					12	
Lowmoor CT	Covington, VA	CombustionTurbine	Light Fuel Oil	2025	48	65
Lowmoor GT1					12	
Lowmoor GT2					12	
Lowmoor GT3					12	
Lowmoor GT4					12	
Mount Storm CT	Mt. Storm, WV	CombustionTurbine	Light Fuel Oil	2025	11	16
Mt. Storm GT1					11	
Northern Neck CT	Warsaw, VA	CombustionTurbine	Light Fuel Oil	2025	47	66
Northern Neck GT1					12	
Northern Neck GT2					11	
Northern Neck GT3					12	
Northern Neck GT4					12	
Possum Point CT	Dumfries, VA	Steam-Cycle	Light Fuel Oil	2025	72	93
Possum Point CT1					12	
Possum Point CT2					12	
Possum Point CT3					12	
Possum Point CT4					12	
Possum Point CT5					12	
Possum Point CT6					12	

(1) Reflects retirement assumptions used for planning purposes, not firm Company commitments except for Chesterfield Units 5 and 6 and Yorktown Unit 3.

230940072

Appendix 5K – Planned Changes to Existing Generation Units

Company Name: Virginia Electric and Power Company

Schedule 13

UNIT PERFORMANCE DATA[1][2]

Unit Size (MW) Uprate and Derate

Unit Name	(ACTUAL) 2020	2021	2022	2023	(PROJECTED) 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Altavista	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bath County 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bear Garden	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brunswick	-	-	-	18.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesapeake CT 1, 4, 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Clover 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Clover 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Darbytown 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Darbytown 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Darbytown 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Darbytown 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Elizabeth River 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Elizabeth River 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Elizabeth River 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gaston Hydro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Anna 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Anna 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gravel Neck 1-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gravel Neck 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gravel Neck 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gravel Neck 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gravel Neck 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Greensville	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hopewell	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ladysmith 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ladysmith 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ladysmith 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ladysmith 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ladysmith 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lowmoor CT 1-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mount Storm 1	-	-	(1.10)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mount Storm 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mount Storm 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mount Storm CT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CVOW (Demonstration)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Anna 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Anna 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Anna Hydro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Neck CT 1-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Possum Point 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Possum Point CT 1-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix 5K – Planned Changes to Existing Generation Units

Company Name: Virginia Electric and Power Company

UNIT PERFORMANCE DATA[1][2]

Unit Size (MW) Uprate and Derate

Schedule 13

	(ACTUAL)										(PROJECTED)								
Unit Name	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**
Remington 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remington 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remington 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remington 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roanoke Rapids Hydro	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rosemary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southampton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Surry 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Surry 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia City Hybrid Energy Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warren	-	-	7.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yorktown 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Appendix 5L – Environmental Regulations

	Constituent	Key Regulation	Final Rule	Compliance Date	Affected Units or Plants	Baseline Means of Compliance
AIR	Hg/HAPs	Mercury & Air Toxics Standards (1) (MATS)	12/16/2011	4/16/2017	Coal & Oil	All affected units compliant
	Hg/HAPs	Mercury & Air Toxics Standards Risk and Technology Review (1)	exp. Q4 2023	exp. Q2 2024	Coal & Oil	The EPA published a proposal in April 2023 to tighten certain aspects of the MATS, rule which include a lower emission limit for filterable particulate matter and required use of CEMS to demonstrate compliance with the PM limit. Other proposed changes include removal of emission limits for total and individual non-mercury HAPS, and elimination of a "startup" definition. The EPA is expecting to come out with a final action by the end of 2023, with the final strategy and implementation likely occurring in the second quarter of 2024.
	HAPs	NESHAPS for stationary combustion turbines (Subpart YYYY)	2/28/2022	2/2022	New / reconstructed CTs – major HAP loc.	Gas fired combined cycle and simple cycle combustion turbines constructed or reconstructed at major sources of HAP emissions after Jan 14, 2003 must meet the formaldehyde standard.
	SO2	CSAPR (2)	2011	2015/2017	All fossil units > 25 MWs	Allowances (In-Sys.; Trading)
		SO2 NAAQS (75 ppb, 1-hr avg)	6/2/2010	2018	Oil: YT 3	Maintain current % sulfur oil level (3)
	NOx	2015 Ozone Standard (70 ppb)	12/2020		All fossil units > 25 MWs	EPA reconsidering the December 2020 final rule that retained the 2015 NAAQS. EPA aiming to complete reconsideration by end of 2023.
		2015 Ozone NAAQS Interstate Transport Federal Implementation Plan (70 ppb) (21)	12/1/2020	Exp. Q1 2023	All fossil units > 25 MWs	The EPA released a pre-publication of the final federal implementation plan ("FIP") on March 15, 2023, addressing interstate transport for the 2015 Ozone NAAQS. Virginia and West Virginia are covered in the FIP. The EPA revised the CSAPR ozone season NOx emissions trading program with additional restrictions not included in any of the current CSAPR trading programs. Coal-fired electric generating units (excluding circulating fluidized bed ("CFB") boilers) would be subject to daily emission rate limits during ozone season and would have to surrender additional allowances (at a 3:1 ratio) if limits are exceeded after the first 50 tons. *Rule becomes effective within 60 days of publication. Rule expected to be published sometime in May 2023.
		CSAPR Update Rule - Group 3 (17)	4/30/2021	5/1/2021	All fossil units	Allowances (In-Sys.; Trading). Focuses on attainment with 2008 ozone standards. All units in compliance.

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Constituent	Key Regulation	Final Rule	Compliance Date	Affected Units or Plants	Baseline Means of Compliance
$PM_{2.5}$	2012 PM 2.5 NAAQs reconsideration	exp. spring 2023		All fossil units	In January, the EPA published a proposed rule resulting from its reconsideration of the primary (health-based) NAAQS for particulate matter ("PM NAAQS"). The EPA is proposing to lower the primary annual $PM_{2.5}$ NAAQS from 12.0 ug/m3 to a level that would fall between 9.0 and 10.0 ug/m3, while soliciting comment on an alternative annual $PM_{2.5}$ standard within the range of 8.0 to 11.0 ug/m3. The EPA is proposing to retain the other PM NAAQs at their current levels, including the secondary 24-hour $PM_{2.5}$ NAAQS. According to the EPA's unified agenda, a final rule is expected in third quarter of 2023
	NSR Permitting for Greenhouse Gases ("GHGs")	5/2010	2011	New/modified fossil units	GHG BACT (On the EPA's unified agenda to revise)
	EGU NSPS (New) (4) (Section 111(b) Subpart TTTT) Proposed revision	Final exp.Q2 2024		New fossil units New units (on/after 12/20/2018)	Build Gas CC or Install CCS 2018 Proposed revision (never finalized): retained the 1,000 lbs/CO_2/MWh limit for new gas CC. Draft expected Q1 2023. The EPA is likely to tighten the limit and require controls on new gas units.
	EGU NSPS (Modified and Reconstructed) (4) Proposed revision (Subpart TTTT) (Section 111(b))	Final exp. Q2 2024		Modified & reconstructed fossil units	Will need to evaluate on a project-by-project basis (draft of rule expected Q1 2023).
	Emission Guidelines for GHG Emissions from Existing EGUs (ACE Replacement rule – Section 111(d))	Final exp. Q2 2024		All existing fossil units	Proposed rule in spring 2023 and final rule expected in spring 2024.

Constituent	Key Regulation	Final Rule	Compliance Date	Affected Units or Plants	Baseline Means of Compliance
CO_2	Virginia CO_2 Budget Trading Rule (RGGI) (12)(5)(26)(20)	Aug-20		Existing and new fossil units ≥ 25 MW; biomass units exempt; biomass emissions from units that co-fire with biomass.	Virginia joined the Regional Greenhouse Gas Initiative ("RGGI") as a direct participant on January 1, 2021. Revenue from the auctions for allowances is returned to the state. Compliance with renewables, new gas, possible unit retirements, and allowance purchases (if applicable). In accordance with the announcement from the acting Secretary of Natural and Historic Resources, Virginia is planning to exit RGGI on December 31, 2023. The period to comment on the repeal rule to exit RGGI ended March 3, 2023.
	Social Cost of Carbon	Jan 2021	Feb 2022	All new/existing coal	Interim social cost of greenhouse gases in effect for federal agencies.
	Efforts to establish GHG NAAQs	Uncertain		All existing/new fossil units	AGs from Oregon, Minnesota, Delaware, Guam, Iowa, Maine, Michigan, and New Mexico signed letter to the EPA supporting GHG NAAQs. While AGs from West Virginia and Kentucky pushed back calling GHG NAAQs "the wrong approach – politically and practically."
	Federal CO_2 Program (Alternative Federal Legislation)	Uncertain	2026	Existing fossil units	Expected price for CO_2.
	The Commonwealth Clean Energy Policy (guidance document only)	7/1/2020	2020 - 2045	Existing and new fossil units	Sets a goal for Virginia to reach net zero emissions by 2045 and additionally states that by 2040 Virginia will have a net zero carbon energy economy. Developing energy resources necessary to produce 30 percent of Virginia's electricity from renewable energy sources by 2030 and 100 percent from Virginia's electricity from carbon-free sources by 2040.
	Virginia Energy Plan (guidance document only)	10/2022	2022 – 2026	Existing and new fossil units, renewables	Encourages investments in hydrogen, carbon capture, and small modular reactors ("SMRs"). The VCEA is to be evaluated based on the latest technology in 2023 and every five years thereafter. Restoring discretion to the SCC concerning plant retirement timelines and authority to defer RPS requirements.
	Federal and state vehicle emission standards	12/1/2021	2023-beyond	Existing and new fossil units	Federal and state rules regulating GHG emissions and low emission vehicle and zero emission vehicle standards. "Electrification" could indirectly impact unit operations

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Constituent		Key Regulation	Final Rule	Compliance Date	Affected Units or Plants	Baseline Means of Compliance
		Virginia Clean Economy Act (18)(22)	7/1/2020	2020 - 2045	Existing and new fossil units	The VCEA establishes a mandatory renewable energy portfolio standard in Virginia. There are mandates for significant developments of renewable energy and energy storage resources, as well as retirement of existing carbon-emitting resources. Includes mandatory retirement of certain fossil-generating units (Chesterfield Units 5 & 6 and Yorktown 3 by 2024) and shutting down all remaining fossil generating units by 2045. Allows the utility to petition for relief from these provisions if electric reliability or security is at risk.
		North Carolina – Clean Energy Plan	Uncertain	Uncertain	RM	North Carolina's Clean Energy Plan sets an electric power sector goal of 70% GHG reduction by 2030 (using a 2005 baseline), and a carbon neutrality goal by 2050. The plan fosters long-term energy affordability and price stability for North Carolina's residents and businesses by modernizing regulatory and planning processes and accelerates clean energy innovation, development, and deployment to create economic opportunities for both rural and urban areas of the state. *North Carolina still uncertain about joining RGGI (possible earliest date to join is January 2024).
		New Proposed Federal Vehicle Emission Standards	Uncertain	2027	All EGUs (indirectly)	In April 2023, the EPA proposed new vehicle standards for light, medium, and heavy-duty vehicles for model year 2027 and beyond. The EPA's proposal increases the stringency of the standard year-over-year on a phase-in approach. This proposal will affect the Company from an electrification standpoint since it will need to supply the electricity to help the transportation sector decarbonize and deploy charging infrastructure to help energize the transportation sector.
		West Virginia – Senate Bill 793	7/2020	7/2025	MS	Provides relief from B and O taxes if the Company keeps station operational until 2025. Required to pay back if facility is shut down. Can receive benefit beyond 2025, until the Company closes the plant plant or bill is appealed or amended.
WASTE	ASH	CCRs	4/17/2015	2020+	CEC landfill & bottom ash pond	Close landfill, bottom ash pond, & original pond due to station closure. Pond and landfill to be excavated and recycled off site. (7)
				2020+	BR North, East, and West Ash Ponds;	Close all three coal ash ponds by excavating material. East Pond and West Pond material has been excavated and consolidated in North Pond. Plan is to construct new landfill on property adjacent to North Pond, close North Pond by removal of CCR material, and place CCR material into new landfill, and close new landfill. (6)
				2020+	PP A/B/C, D and E Ponds	All five ponds to be closed. Ponds A/B/C and E have been excavated of CCR and material consolidated in Pond D. Plan is to construct new landfill adjacent to Pond D. Continuing to evaluate onsite and offsite disposal options or offsite recycling. (6)

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Constituent		Key Regulation	Final Rule	Compliance Date	Affected Units or Plants	Baseline Means of Compliance
				2020+	CH 3, 4, 5 & 6, Lower and Upper Ponds	Lower and Upper Ponds Closure through excavation of CCR material and hauling to onsite or offsite landfill for disposal or offsite for recycling. (6)
				2020	YT 1, 2	Landfill closure (due to coal unit retirements). Closure completed September 20, 2020.
				10/2018	CL 2 FGD Ponds;	Ponds retrofitted in compliance with CCR Rule and placed back into service.
				10/2018	MS Finger and Pyrite Ponds	Pond closure, retrofit, and/or rebuilding. Three of the five original ponds placed back into service in compliance with CCR Rule.
				TBD	BR, CEC, CH, CL, MS, PP, VCHEC, YT	Monitor groundwater and corrective actions, if needed.
WATER	Water 316b	316(b) Impingement & Entrainment (316a) Thermal discharge biological effects	5/19/2014	2016 (1-4)	BG	Rule 316(b)) studies to determine compliance needs and submit design & source water body data
				2019 (9-12)	NA, AV	Rule 316(b)) studies to determine compliance needs and submit design & source water body data
				2020 (1-4)	SU, PP	
				2021	CH	
				2022 (1-3)	YT3	VSDs; Screens; Fish Returns
				2022	CL	
				[illegible]		
				2028 (1-4)	NA	VSDs; Screens; Fish Returns
				2028 (1-4)	SU	
				2023, 2028 (1-4)	CL, 5,6,7/8 (1-2)	
				NA	CH, SU	Surry's Rule 316(a) demonstration update report submitted on August 25, 2020. Chesterfield's Rule 316(a) demonstration update report submitted on December 29, 2020 Fish protection pilot study conducted in 2021 may help mitigate future required measures at Chesterfield. Decision to reissue Rule 316(a) variance at both Chesterfield and Surry will be made by the Virginia Department of Environmental Quality ("VDEQ") during next permit reissuance process expected – 2024-2025.

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Constituent		Key Regulation	Final Rule	Compliance Date	Affected Units or Plants	Baseline Means of Compliance
[illegible]	[illegible]	[illegible] Discharge Discharge [illegible] Effluent Limitation Guidelines (2)	9/30/2015	[illegible]	[illegible]	Rule [illegible] [illegible] 2017 [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] requirement [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

4) The 2015 rule is under EPA review for possible repeal or replacement rule. The EPA published proposed revisions on December 20, 2018.

5) In August 2020, VDEQ issued a final rule establishing a cap-and-trade program for direct participation in RGGI starting on January 1, 2021, and includes about a 30% reduction in the regional cap from 2021 levels by 2030.

6) As a result of the SB 1355 legislation (Virginia Code § 10.1-1402.03), ash in ponds must be excavated and disposed of in the landfill or taken off site for recycling. Exact timing of the start of work at each site is to be determined.

7) Agency determined the 316(b) Rule does not apply to Mt. Storm under the assumption that the plant's man-made lake does not qualify as a "water of the U.S."

8) All known Rule 316(b) studies have been submitted. Technology determinations pending from VDEQ in next permit renewals.

9) Rule 316(b) information for NA submitted and under consideration by VDEQ.

10) Y3 required to retire by December 21, 2024, by the VCEA. The information required by the rule was submitted to VDEQ on July 21, 2022.

11) Assumes permit issued with a 4-year compliance schedule. Projected permit issuance dates: NA - January 2024, SU - March 2024, CH - September 2024.

12) The rule does not apply to EGUs < 25 MW, , biomass units, or biomass emissions from units that co-fire with biomass (*i.e.*, VCHEC).

13) March 31, 2024 is the applicability deadline that was submitted to DEP for their approval in October 2021.

14) Rule 316(b) studies and reports completed and submitted to agency. Permits administratively continued and waiting for BTA determination.

15) Compliance dates are determined during NPDES permit reissuance process and are expected to be the same as those shown for Rule 316(b) compliance.

16) Cost of allowances can be recovered by Phase I and Phase II utilities from ratepayers.

17) Final rule required the EPA to issue FIPs with revised tighter NOx allowance budgets via a Group 3 Trading program.

18) The VCEA includes a provision to adopt regulations no earlier than July 1, 2024, to reduce CO_2 using a multistate trading program for the period of 2031 to 2050.

19) Having the units shutdown prior to the ELG-driven deadline of December 31,2023 relieves DE of any further Rule 316(b) compliance requirements for Units 5 & 6. Compliance is satisfied by shutting the units down because they are no longer withdrawing cooling water. and therefore Rule 316(b) requirements will not apply.

20) On January 15, 2022, Governor Youngkin signed Executive Order 9, which orders the VDEQ to start the process to withdraw Virginia from RGGI.

21) The EPA issued prepublication of Federal Implementation Plans in March 2023.

22) The VCEA became the roadmap for Executive Order 43. The Virginia Department of Mines, Minerals, and Energy, now known as the Virginia Department of Energy, modeling submitted on January 1, 2022, is the plan of action.

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Appendix 5M - Tabular Results of Busbar

	Capacity Factor (%)										
$/kW-Year	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
3x1 CC Greenfield	$ 250	$ 282	$ 314	$ 346	$ 378	$ 410	$ 442	$ 474	$ 506	$ 538	$ 570
2x1 CC Greenfield	$ 281	$ 312	$ 343	$ 374	$ 405	$ 436	$ 468	$ 499	$ 530	$ 561	$ 592
1x1 CC Greenfield	$ 330	$ 369	$ 407	$ 446	$ 485	$ 524	$ 562	$ 601	$ 640	$ 678	$ 717
CT	$ 134	$ 195	$ 256	$ 316	$ 377	$ 438	$ 498	$ 559	$ 620	$ 681	$ 741
CT (Aero)	$ 253	$ 301	$ 348	$ 395	$ 443	$ 490	$ 538	$ 585	$ 633	$ 680	$ 727
Nuclear SMR	$ 1,264	$ 1,259	$ 1,255	$ 1,250	$ 1,245	$ 1,241	$ 1,236	$ 1,232	$ 1,227	$ 1,222	$ 1,218
Solar				$ 124							
Distributed Solar (3 MW)				$ 415							
Wind - On-Shore					$ 219						
Wind - Off-Shore					$ 287						
Battery Generic 4H (30 MW)			$ 384								
Pump Hydro Storage (300 MW)			$ 1,076								

Notes:

(1) Offshore Wind has a capacity factor of 43%.

(2) Onshore Wind has a capacity factor of 37%.

(3) Solar has a capacity factor of 25%.

(4) Distributed solar has a capacity factor of 24%.

(5) Batteries and Pump Storage have a capacity factor of 15%.

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Appendix 5N - Busbar Assumptions

Nominal $	Heat Rate	Variable Cost [1]	Fixed Cost [2]		Book Life	2023 Real $ [3]
	MMBtu/MWh	$/MWh	$/kW-Year	$/MWh	Years	$/kW
3x1 CC Greenfield	5.39	$37	$250	$36	36	$977
2x1 CC Greenfield	5.40	$35	$281	$40	36	$1,215
1x1 CC Greenfield	5.42	$44	$330	$47	36	$1,574
CT	8.88	$69	$134	$102	36	$1,179
CT (Aero)	8.03	$54	$253	$193	36	$2,312
Nuclear SMR	12.17	-$5	$1,264	$157	60	$10,954
Solar - Tracker	-	-$32	$209	$96	35	$2,006
Distributed Solar (3 MW)	-	-$9	$440	$213	35	$4,522
Wind - On-Shore	-	-$32	$331	$101	25	$2,356
Wind - Off-Shore	-	-$33	$403	$106.26	30	$3,965
Battery Generic 4H (30 MW)	-	$50	$296	$225	20	$2,863
Pump Hydro Storage (300 MW)	-	$74	$946	$720	50	$9,667

Notes:

(1) Variable costs for solar and wind includes RECs value.

(2) Fixed costs include capital expenditures, fixed O&M, federal tax credits, and gas firm transmission expenses.

(3) Values in this column represent overnight installed cost.

Appendix 5O – Renewable R s (for Plan B)

Company Name: Virginia Electric and Power Company

RENEWABLE R GENERATION (GWh)

Sd

Resource Type[1]	Unit Name	State	C.O.D.[2]	Build / Purchase / Convert[3]	Life/ Duration[4]	Size MW[5]	2020 (ACTUAL)	2021 (ACTUAL)	2022 (ACTUAL)	2023 (PROJECTED)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Hydro																									
	Gaston Hydro	NC	1963	Build	N/A	220	376	276	219	330	331	330	330	330	331	330	330	330	331	330	330	330	331	330	330
	North Anna Hydro	VA	1987	Build	N/A	1	1	0	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Roanoke Rapids Hydro	NC	1955	Build	N/A	95	401	386	145	295	296	295	295	295	296	295	295	295	296	295	295	295	296	295	295
Sub-total: NC						315	778	661	363	625	627	625	625	625	627	625	625	625	627	625	625	625	627	625	625
Sub-total: VA						1	1	0	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Sub-total: Hydro						316	778	661	363	627	629	627	627	627	629	627	627	627	629	627	627	627	629	627	627
Solar																									
	Existing VA Solar PPAS 2020	VA	2020	Purchase	20	67	-	-	-	150	150	150	151	150	150	150	151	150	150	150	151	150	150	150	151
	Grassfield Solar	VA	2023	Build	35	20	-	-	-	39	39	38	38	38	38	38	37	37	37	37	37	36	36	36	36
	Norge Solar	VA	2023	Build	35	20	-	-	-	39	39	38	38	38	38	38	37	37	37	37	37	36	36	36	36
	Cavalier PPA	VA	2025	Purchase	20	155	-	-	-	-	-	302	300	299	298	295	294	292	292	289	288	286	286	283	282
	Chesapeake PPA	VA	2024	Purchase	20	118	-	-	-	-	230	228	227	225	225	223	222	221	221	219	217	216	216	214	213
	Pleasant Hill PPA	VA	2023	Purchase	20	20	-	-	-	39	39	38	38	38	38	38	37	37	37	37	37	36	36	36	36
	Rivanna PPA	VA	2024	Purchase	20	13	-	-	-	-	24	24	24	23	23	23	23	23	23	23	23	23	22	22	22
	Wellington PPA	VA	2023	Purchase	20	20	-	-	-	39	39	38	38	38	38	38	37	37	37	37	37	36	36	36	36
	Wythe 2 PPA	VA	2024	Purchase	20	75	-	-	-	-	146	145	144	143	143	142	141	140	140	139	138	137	137	136	135
	Sycamore Solar	VA	2023	Build	35	42	-	-	-	81	81	81	80	80	80	79	79	78	78	77	77	77	76	76	75
	Black Bear Distributed	VA	2024	Build	35	2	-	-	-	-	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Clean Energy 2 DER 2	VA	2023	Purchase	20	15	-	-	-	29	29	29	29	29	28	28	28	28	28	28	27	27	27	27	27
	Clean Energy 2 DER 3	VA	2023	Purchase	20	7	-	-	-	14	14	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	Springfield Distributed	VA	2024	Build	35	2	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	360 PPA	VA	2027	Purchase	20	52	-	-	-	-	-	-	-	101	101	100	99	99	99	98	97	97	97	96	95
	Cox PPA	VA	2024	Purchase	20	16	-	-	-	-	31	31	31	31	31	30	30	30	30	30	29	29	29	29	29
	Ho Fel PPA	VA	2025	Purchase	20	40	-	-	-	-	-	78	77	77	77	76	76	75	75	74	74	74	74	73	73
	Sinai PPA	VA	2024	Purchase	20	10	-	-	-	-	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18
	Stratford PPA	VA	2023	Purchase	20	15	-	-	-	29	29	29	29	29	28	28	28	28	28	28	27	27	27	27	27
	Surry PPA	VA	2025	Purchase	20	20	-	-	-	-	-	39	39	38	38	38	38	38	38	37	37	37	37	36	36
	Camellia Solar	VA	2024	Build	35	20	-	-	-	-	35	35	35	35	35	34	34	34	34	34	33	33	33	33	33
	Dulles Tied Solar	VA	2026	Build	35	100	-	-	-	-	-	-	173	172	171	170	169	168	168	166	166	165	164	163	162
	Fountain Creek Solar	VA	2024	Build	35	80	-	-	-	-	155	154	153	152	152	150	150	149	149	147	147	146	146	144	143
	Otter Creek Solar	VA	2024	Build	35	60	-	-	-	-	117	116	115	115	114	113	113	112	112	111	111	110	110	109	108
	Piney Creek Base Solar	VA	2024	Build	35	80	-	-	-	-	156	154	154	153	153	151	151	150	150	148	147	147	146	145	144
	Quillwort Solar	VA	2024	Build	35	18	-	-	-	-	35	35	35	34	34	34	34	34	34	33	33	33	33	33	32
	Sebera Solar	VA	2024	Build	35	18	-	-	-	-	31	31	31	31	31	30	30	30	30	30	30	30	29	29	29
	Solidago Solar	VA	2023	Build	35	20	-	-	-	39	39	38	38	38	38	38	37	37	37	37	37	36	36	36	36
	Sweet Sue Solar	VA	2026	Build	35	75	-	-	-	-	-	-	145	144	144	143	142	141	141	140	139	138	138	137	136
	Walnut Solar	VA	2023	Build	35	150	-	-	-	262	261	259	258	256	255	254	253	251	250	249	247	246	245	243	242
	Winterberry Solar	VA	2023	Build	35	20	-	-	-	39	39	38	38	38	38	38	37	37	37	37	37	36	36	36	36
	Winterpock Solar	VA	2024	Build	35	20	-	-	-	-	39	39	38	38	38	38	38	37	37	37	37	37	37	36	36
	Augusta PPA	VA	2025	Purchase	20	105	-	-	-	-	-	204	203	202	201	200	199	198	197	196	195	193	193	191	190
	Clean Energy 3 DER 1	VA	2024	Purchase	20	3	-	-	-	-	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Clean Energy 3 DER 2	VA	2024	Purchase	20	12	-	-	-	-	24	23	23	23	23	23	23	23	23	23	22	22	22	22	22
	Pivot Energy VA 2	VA	2025	Purchase	20	1	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Groves PPA	VA	2027	Purchase	20	16	-	-	-	-	-	-	-	29	29	28	28	28	28	28	28	27	27	27	27
	Harrisonburg PPA	VA	2027	Purchase	20	15	-	-	-	-	-	-	-	29	29	29	29	29	28	28	28	28	28	28	27
	Jarratt PPA	VA	2025	Purchase	20	48	-	-	-	-	-	94	93	93	93	92	92	91	91	90	90	89	89	88	88
	Switchgrass PPA	VA	2025	Purchase	20	69	-	-	-	-	-	126	125	124	124	123	122	122	122	121	120	119	119	118	117
	Bridleton Solar	VA	2026	Build	35	20	-	-	-	-	-	-	35	35	35	35	35	34	34	34	34	34	34	33	33
	Cerulean Solar	VA	2026	Build	35	62	-	-	-	-	-	-	120	120	119	118	118	117	117	116	115	115	114	114	113
	Courthouse Solar	VA	2026	Build	35	167	-	-	-	-	-	-	299	298	297	295	293	292	291	289	287	286	285	283	281
	Ivy Landfill Distributed	VA	2025	Build	35	3	-	-	-	-	-	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Racefield Distributed	VA	2025	Build	35	3	-	-	-	-	-	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Kings Creek Solar	VA	2026	Build	35	20	-	-	-	-	-	-	36	36	36	35	35	35	35	35	35	34	34	34	34
	Southern VA Solar	VA	2025	Build	35	126	-	-	-	-	-	218	217	216	215	214	213	212	211	210	209	207	207	205	204
	Moon Corner Solar	VA	2026	Build	35	60	-	-	-	-	-	-	116	116	115	115	114	113	113	112	112	111	111	110	109
	North Ridge Solar	VA	2026	Build	35	20	-	-	-	-	-	-	39	39	39	38	38	38	38	38	37	37	37	37	37
	Solar_DG Hybrid - (3MW)	VA	2030	Build/Purchase	35	0	-	-	-	-	-	-	-	-	-	-	87	302	517	729	940	1,157	1,376	1,586	1,792
	Solar_DG Hybrid - (3MW) 2C	VA	2027	Build/Purchase	35	3	-	-	-	-	-	-	-	29	29	29	29	29	28	28	28	28	28	28	27
	Solar_DG Hybrid - (3MW) 2C	VA	2028	Build/Purchase	35	3	-	-	-	-	-	-	-	-	58	58	58	57	57	57	56	56	56	56	55
	Solar_DG Hybrid - (3MW) 2C	VA	2029	Build/Purchase	35	3	-	-	-	-	-	-	-	-	-	87	87	86	86	86	85	85	84	84	83
	Generic Solar PV Hybrid- (6C	VA	2030	Build/Purchase	35	60	-	-	-	-	-	-	-	-	-	-	1,396	3,137	4,883	6,591	8,304	10,009	11,739	13,393	15,071
	Generic Solar PV Hybrid- (6C	VA	2027	Build/Purchase	35	60	-	-	-	-	-	-	-	1,165	1,162	1,153	1,147	1,141	1,139	1,130	1,124	1,118	1,115	1,108	1,100
	Generic Solar PV Hybrid- (6C	VA	2028	Build/Purchase	35	60	-	-	-	-	-	-	-	-	1,285	1,275	1,268	1,262	1,259	1,249	1,243	1,236	1,233	1,223	1,217
	Generic Solar PV Hybrid- (6C	VA	2029	Build/Purchase	35	60	-	-	-	-	-	-	-	-	-	1,281	1,275	1,269	1,265	1,255	1,249	1,243	1,240	1,230	1,223
	Water Strider PPA	VA	2016	Purchase	17	80	-	118	178	156	156	156	156	156	156	156	156	156	156	156	156	154	156	156	150
	Westmoreland PPA	VA	2016	Purchase	17	20	-	11	46	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
	Solar Partnership Program	VA	2016	Build	12	7	6	9	5	9	9	9	9	9	9	9	9	9	9	9	8	8	-	-	-
	Scott Solar	VA	2010	Build	34	17	32	30	31	33	33	33	33	33	33	32	32	32	32	32	32	31	31	31	31
	Whitehouse Solar	VA	2016	Build	34	20	34	38	31	39	38	38	38	38	38	37	37	37	37	37	36	36	36	36	36
	Woodland Solar	VA	2016	Build	34	19	32	37	25	37	37	37	36	36	36	36	36	35	35	35	35	35	35	34	34
	Colonial Trail West	VA	2019	Build	35	142	301	276	275	273	272	270	269	267	267	265	264	262	261	259	258	257	256	254	253
	Spring Grove	VA	2020	Build	35	93	7	203	178	189	188	187	186	185	184	183	182	181	181	179	179	177	177	176	175
	Sadler Solar	VA	2021	Build	34	100	-	161	187	194	195	194	194	194	195	194	194	194	195	194	194	194	195	194	194
Sub-total: NC						0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total: VA						2,892	412	-	-	1,768	2,817	3,872	4,819	6,149	7,479	8,794	10,237	12,149	14,091	15,948	17,830	19,709	21,630	23,430	25,280
Sub-total: Solar						2,892	412	-	-	1,768	2,817	3,872	4,819	6,149	7,479	8,794	10,237	12,149	14,091	15,948	17,830	19,709	21,630	23,430	25,280

Appendix 5O – Renewable F[illegible]rces (for Plan B)

Company Name: Virginia Electric and Power Company

RENEWABLE ! GENERATION (GWh)

Resource Type[1]	Unit Name	State	C.O.D.[2]	Build / Purchase / Convert[3]	Life/ Duration[4]	Size MW[5]	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
							(ACTUAL)										(PROJECTED)								
Wind																									
Offshore	CVOW (Demonstration)	VA	2021	Build	27	12	13	50	51	40	41	40	40	40	41	40	40	40	41	40	40	40	41	40	40
Offshore	CVOW - Phase 1 (2587MW)	VA	2027	Build	30	2,587	-	-	-	-	-	-	-	9,523	9,567	9,523	9,523	9,523	9,567	9,523	9,523	9,523	9,567	9,523	9,523
Offshore	CVOW - Phase 2 (2587MW)	VA	2033	Build	30	2,600	-	-	-	-	-	-	-	-	-	-	-	-	-	9,571	9,571	9,571	9,615	9,571	9,571
Onshore	New Wind 80MW	VA	2028	Build	25	80	-	-	-	-	-	-	-	-	283	282	282	282	283	282	282	282	283	282	282
Onshore	New Wind 120MW	VA	2028	Build	25	120	-	-	-	-	-	-	-	-	395	364	364	364	366	364	364	364	366	364	364
Onshore	Generic Wind- (60MW)	VA	2028	Build	25	60	-	-	-	-	-	-	-	-	196	197	197	394	398	394	592	597	594	789	789
	Sub-total: NC					0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sub-total: VA					5,459	13	50	51	40	41	40	40	9,563	10,454	10,407	10,407	10,604	10,652	20,175	20,372	20,372	20,465	20,569	20,569
Sub-total: Wind						5,459	-	50	51	40	41	40	40	9,563	10,454	10,407	10,407	10,604	10,652	20,175	20,372	20,372	20,465	20,569	20,569
	Total Renewables: NC					315	778	661	363	625	627	625	625	625	627	625	625	625	627	625	625	625	627	625	625
	Total Renewables: VA					8,352	476	50	51	1,809	2,860	3,915	4,862	15,715	17,938	19,203	20,646	22,756	24,745	36,123	38,204	40,083	42,007	44,001	45,852
Total Renewables						8,667	1,181	711	414	2,434	3,487	4,540	5,487	16,340	18,563	19,828	21,271	23,381	25,372	36,748	38,829	40,708	42,724	44,626	46,477

(1) Per definition in Va. Code § 56-576

(2) Commercial operation date

(3) Company built, purchased, or converted

(4) Expected life of facility or duration of purchase contract

(5) Net summer capacity for hydro, nameplate for solar and wind

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Appendix 5P – Potential Supply- Side Resources for Plan B

Company Name: _____ **Schedule 15b**

UNIT PERFORMANCE DATA

Potential Supply-Side Resources (MW)

Unit Name	Unit Type	Primary Fuel Type	C.O.D.(1)	MW Annual Firm	MW Nameplate
Solar 2027	Intermittent	Solar	2027	163	615
Solar 2028	Intermittent	Solar	2028	183	690
Generic CT	Peak	Natural Gas	2028	970	970
Onshore Wind	Intermittent	Wind	2028	31	260
Generic Battery	Storage		2028	79	90
Solar 2029	Intermittent	Solar	2029	187	705
Generic Battery	Storage		2029	105	120
Solar 2030	Intermittent	Solar	2030	203	765
Generic Battery	Storage		2030	131	150
Solar 2031	Intermittent	Solar	2031	268	1,011
Onshore Wind	Intermittent	Wind	2031	7	60
Generic Battery	Storage		2031	158	180
Solar 2032	Intermittent	Solar	2032	268	1,011
Generic Battery	Storage		2032	158	180
Solar 2033	Intermittent	Solar	2033	268	1,011
Offshore Wind	Intermittent	Wind	2033	797	2,600
Generic Battery	Storage		2033	210	240
Solar 2034	Intermittent	Solar	2034	268	1,011
Onshore Wind	Intermittent	Wind	2034	7	60
Generic Battery	Storage		2034	210	240
Nuclear	Baseload	Uranium	2034	268	268
Solar 2035	Intermittent	Solar	2035	269	1,014
Generic Battery	Storage		2035	236	270
Generic CT	Peak	Natural Gas	2035	485	485
Solar 2036	Intermittent	Solar	2036	269	1,014
Generic Battery	Storage		2036	263	300
Nuclear	Baseload	Uranium	2036	268	268
Generic CT	Peak	Natural Gas	2036	485	485
Solar 2037	Intermittent	Solar	2037	269	1,014
Onshore Wind	Intermittent	Wind	2037	7	60
Generic Battery	Storage		2037	263	300
Generic CT	Peak	Natural Gas	2037	485	485
Solar 2038	Intermittent	Solar	2038	269	1,014
Generic Battery	Storage		2038	263	300
Nuclear	Baseload	Uranium	2038	268	268
Generic CT	Peak	Natural Gas	2038	485	485

(1) Estimated commercial operation date

Appendix 5Q – Summer Capacity Position for Plan B

Company Name: Virginia Electric and Power Company

Schedule 16

UTILITY CAPACITY POSITION (MW)

	(ACTUAL)				(PROJECTED)														
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Existing Capacity																			
Conventional	17,228	17,200	17,105	15,118	15,118	14,872	14,872	14,872	14,872	14,872	14,872	14,872	14,872	14,872	14,872	14,872	14,872	14,872	14,872
Renewable NC	-	-	-	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315	315
Renewable VA	72	128	224	791	1,279	1,295	1,292	1,130	961	861	802	711	633	615	597	580	570	562	553
Renewable	72	128	224	1,106	1,594	1,610	1,607	1,445	1,276	1,176	1,117	1,026	948	930	912	895	885	877	868
Storage NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage VA	-	-	-	1,849	1,851	1,858	1,850	1,851	1,851	1,852	1,851	1,851	1,851	1,850	1,849	1,848	1,848	1,847	1,847
Storage	1,809	1,809	1,809	1,849	1,851	1,858	1,850	1,851	1,851	1,852	1,851	1,851	1,851	1,850	1,849	1,848	1,848	1,847	1,847
Total Existing Capacity	19,109	19,137	19,293	18,072	18,561	18,332	18,219	18,168	17,999	17,889	17,840	17,748	17,670	17,652	17,633	17,615	17,604	17,585	17,586
Generation Under Construction																			
Conventional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Renewable NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Renewable VA	-	-	-	-	-	290	548	1,505	1,395	1,257	1,238	1,140	1,179	1,015	1,008	997	993	989	985
Renewable	-	-	-	-	-	290	548	1,505	1,395	1,257	1,238	1,140	1,179	1,015	1,009	997	993	989	985
Storage NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage VA	-	-	-	-	-	53	154	181	166	170	172	179	168	164	160	156	152	149	145
Storage	-	-	-	-	-	53	154	181	166	170	172	179	168	164	160	156	152	149	145
Total Planned Construction Capacity	-	-	-	-	-	344	702	1,687	1,561	1,437	1,410	1,319	1,346	1,179	1,168	1,154	1,146	1,138	1,130
Generation Under Development																			
Conventional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Renewable NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Renewable VA	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Renewable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage NC	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage VA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Planned Development Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potential (Expected) New Capacity																			
Conventional	-	-	-	-	-	-	-	-	970	970	970	970	970	970	1,214	1,699	2,429	2,913	3,642
Renewable NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Renewable VA	-		-	-	-	-	-	295	548	730	919	1,079	1,166	2,083	2,200	2,415	2,502	2,768	2,800
Renewable	-	-	-	-	-	-	-	295	548	730	919	1,079	1,166	2,083	2,200	2,415	2,502	2,768	2,800
Storage NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage VA	-	-	-	-	-	-	-	-	83	202	256	540	720	944	1,160	1,397	1,646	1,884	2,109
Storage	-	-	-	-	-	-	-	-	83	202	256	540	720	944	1,160	1,397	1,646	1,884	2,109
Total Potential New Capacity	-	-	-	-	-	-	-	295	1,599	1,901	2,245	2,589	2,856	3,097	4,634	5,510	6,866	7,565	8,691
Other (PPA)																			
Conventional	-	-	-	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158
Renewable NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Renewable VA	-	-	64	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
Renewable	-	-	64	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
Storage NC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage VA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other (PPA) Capacity	-	-	64	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224
Unforced Availability	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Generation Capacity	19,109	19,137	19,293	18,296	18,784	18,829	19,172	20,354	21,383	21,460	21,718	21,871	22,096	23,050	23,657	24,502	25,645	26,522	27,631
Energy Efficiency & Demand Response[2]	74	231	166	198	306	604	635	701	722	734	735	742	758	783	785	790	778	790	822
Customer Choice[2]	-	-	-	658	658	658	658	658	658	658	658	658	658	658	658	658	658	658	658
Net Generation & Demand-side	19,183	19,407	19,479	19,296	19,784	19,890	19,172	20,354	21,383	21,460	21,718	21,871	22,096	23,050	23,657	24,502	25,645	26,522	27,631
Capacity Sale[3]	-	-	861	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capacity Purchase[3]	858	465	-	1,245	1,019	908	1,436	684	83	486	788	1,217	1,707	1,513	1,847	1,928	1,958	2,211	2,423
Capacity Adjustment[3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capacity Requirement or PJM Capacity Obligation	20,041	19,935	18,618	19,531	19,804	19,898	20,609	21,038	21,466	21,946	22,507	23,088	23,803	24,563	25,504	26,501	27,508	28,732	30,044
Net Utility Capacity Position	-	-	-	(1,245)	(1,019)	(908)	(1,436)	(684)	(83)	(486)	(788)	(1,217)	(1,707)	(1,513)	(1,847)	(1,998)	(1,958)	(2,211)	(2,423)

(1) Values accounted for in the load forecast
(2) Efficiency programs are not part of the Company's calculation of capacity
(3) Capacity sale, purchase, and adjustments are used for modeling purposes
(4) 2020 and 2021 actual historical data based upon measured and verified EM&V results. 2022 historical data based on projections

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Appendix 5R – Capacity Position for Plan B

Company Name: Virginia Electric and Power Company

Schedule 4

POWER SUPPLY DATA

	(ACTUAL)				(PROJECTED)														
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
I. Capability (MW)																			
1. Summer																			
a. Firm Capacity Capacity[1]	19,109	19,137	19,228	18,062	18,561	18,676	18,948	20,130	21,159	21,237	21,495	21,647	21,873	22,827	23,434	24,279	25,416	26,298	27,397
b. Positive Interchange Commitments[2]	-	-	64	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224
c. Capacity Sale[3]	-	-	961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d. Capacity Purchase[3]	858	468	-	1,245	1,019	999	1,496	684	83	486	788	1,217	1,707	1,513	1,847	1,998	1,956	2,211	2,423
e. Capacity Adjustment[3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
f. Total Net Summer Capability[4]	19,966	19,605	20,254	19,531	19,804	19,898	20,668	21,038	21,466	21,946	22,507	23,088	23,803	24,563	25,504	26,501	27,596	28,732	30,044
2. Winter																			
a. Firm Capacity Capacity[1]	19,109	19,137	19,228	18,530	18,549	18,272	18,378	20,328	21,499	21,631	21,800	22,001	22,183	24,357	24,855	25,621	26,669	27,443	28,466
b. Positive Interchange Commitments[4]	-	-	64	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157
e. Total Net Winter Capability[4]	19,109	19,137	19,293	18,687	18,706	18,429	18,535	20,485	21,656	21,788	21,957	22,158	22,340	24,514	25,012	25,778	26,826	27,600	28,623

(1) Net seasonal capability.

(2) Does not include firm commitments from existing purchase power agreements and estimated solar PPAs.

(3) Capacity sale, purchase, and adjustments are used for modeling purposes.

(4) Does not include behind-the-meter generation MW.

*Demand response programs are not classified as capacity resources and are included in adjusted load (Appendix 4H)

Appendix 5S – Construction Forecast

Company Name: Virginia Electric and Power Company

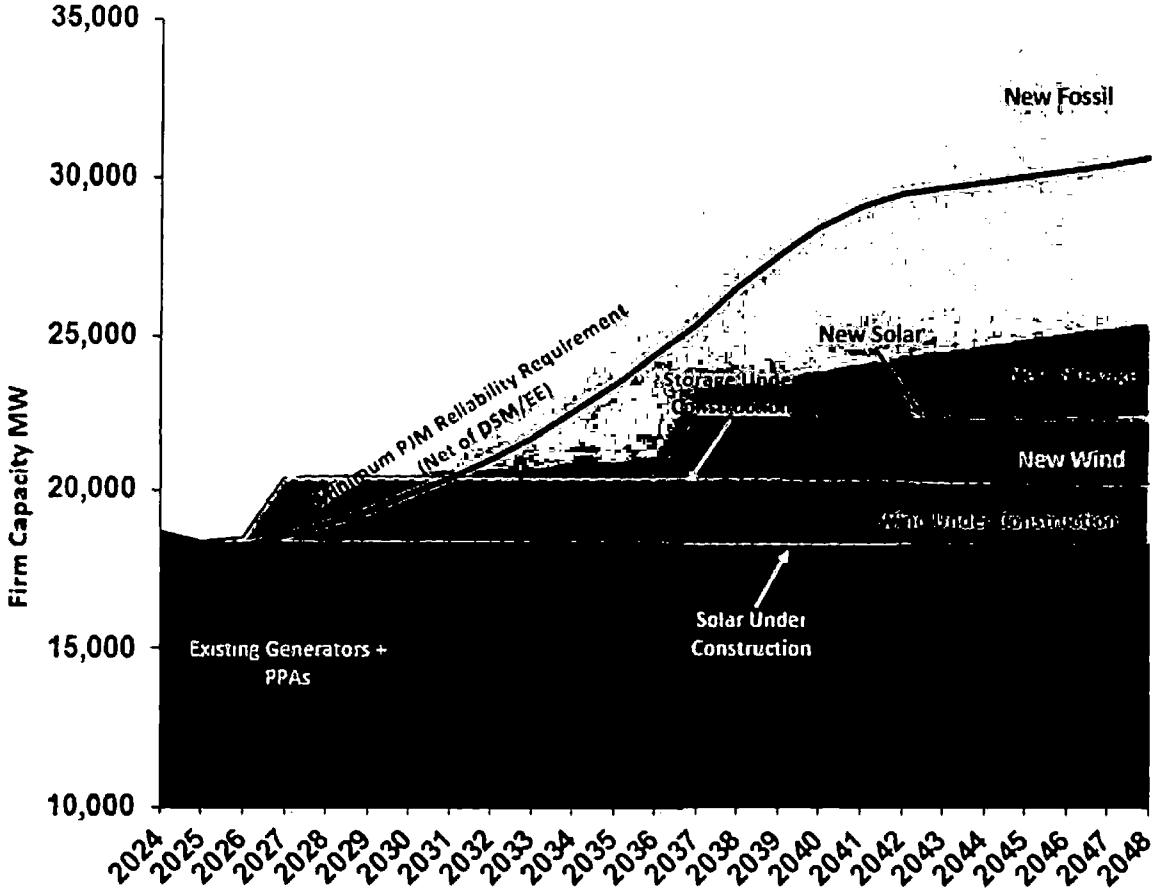
Schedule 17

CONSTRUCTION COST FORECAST (Thousand Dollars)

(PROJECTED)

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
I. New Traditional Generating Facilities																
a. Construction Expenditures (non-AFUDC)	-	17,083	175,995	370,545	730,162	812,976	806,240	1,345,699	1,658,966	2,180,837	2,335,587	2,442,488	2,330,238	2,190,722	2,003,177	1,883,440
b. AFUDC	-	29	357	1,286	3,158	5,781	5,016	8,675	13,783	20,311	27,989	38,112	32,819	38,171	31,054	35,199
c. Annual Total	-	17,112	176,353	371,831	733,320	818,757	811,256	1,354,374	1,672,749	2,200,948	2,363,575	2,478,600	2,363,057	2,228,893	2,034,231	1,898,638
d. Cumulative Total	-	17,112	193,464	565,296	1,298,615	2,117,372	2,928,628	4,283,002	5,955,751	8,156,699	10,520,275	12,998,875	15,361,932	17,590,825	19,625,056	21,523,695
II. New Renewable Generating Facilities																
a. Construction Expenditures (non-AFUDC)	108,935	800,624	611,325	1,154,869	1,455,289	2,360,001	3,892,505	4,620,973	4,175,148	2,509,425	1,747,836	1,595,035	1,580,487	1,617,133	1,588,485	1,337,752
b. AFUDC	185	1,732	4,132	7,135	11,572	15,083	20,191	31,338	42,834	48,778	51,090	11,909	11,680	11,988	12,251	11,358
c. Annual Total	109,120	802,356	615,457	1,162,004	1,466,861	2,375,084	3,912,697	4,652,312	4,217,882	2,558,203	1,799,027	1,606,944	1,592,167	1,629,121	1,600,736	1,349,110
d. Cumulative Total	109,120	911,476	1,526,933	2,688,937	4,155,798	6,530,882	10,443,579	15,095,890	19,313,872	21,872,075	23,671,102	25,278,045	26,870,212	28,499,333	30,100,069	31,449,179
III. New Storage Facilities																
a. Construction Expenditures (non-AFUDC)	-	-	20,462	43,171	111,595	210,681	255,055	309,069	344,936	392,225	453,425	481,520	527,624	526,712	536,242	483,772
b. AFUDC	-	-	35	143	406	954	1,189	1,419	1,637	1,808	2,155	2,279	2,517	2,636	2,568	2,415
c. Annual Total	-	-	20,497	43,314	112,001	211,635	256,245	310,488	346,574	394,033	455,580	483,799	530,142	529,347	538,810	486,187
d. Cumulative Total	-	-	20,497	63,811	175,812	387,447	643,691	954,180	1,300,753	1,694,787	2,150,367	2,634,165	3,164,307	3,693,654	4,232,464	4,718,651
IV. Other Facilities																
a. Transmission	1,581,714	1,560,480	1,824,764	1,795,733	1,823,052	1,883,346	1,879,406	1,882,439	1,430,000	1,430,000	1,430,000	1,430,000	1,430,000	1,430,000	1,430,000	1,430,000
b. Distribution	1,386,177	1,399,451	1,408,764	1,439,768	1,417,925	1,370,855	1,247,114	1,052,248	1,105,986	1,156,618	1,255,413	1,291,319	1,325,852	985,656	1,005,572	1,025,371
c. Energy Conservation & DR																
d. Other																
e. AFUDC	75,372	103,003	136,962	169,867	142,448	101,154	84,094	61,061	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
f. Annual Total	3,043,263	3,062,935	3,370,490	3,405,368	3,383,425	3,335,355	3,210,614	3,015,748	2,605,986	2,656,618	2,755,413	2,791,319	2,825,852	2,485,656	2,505,572	2,525,371
g. Cumulative Total	3,043,263	6,106,198	9,476,688	12,882,055	16,265,480	19,600,835	22,811,449	25,827,198	28,433,184	31,089,802	33,845,215	36,636,534	39,462,386	41,948,042	44,453,615	46,978,986
V. Total Construction Expenditures																
a. Annual	3,152,384	3,882,402	4,182,796	4,982,517	5,695,607	6,740,831	8,190,811	9,332,922	8,843,290	7,809,803	7,373,596	7,360,661	7,311,218	6,873,017	6,679,350	6,259,307
b. Cumulative	3,152,384	7,034,785	11,217,581	16,200,098	21,895,706	28,636,536	36,827,348	46,160,270	55,003,560	62,813,363	70,186,958	77,547,619	84,858,837	91,731,854	98,411,203	104,670,511
VI. % of Funds for Total Construction Provided from External Financing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix 5T: Winter Capacity Charts
Plan A



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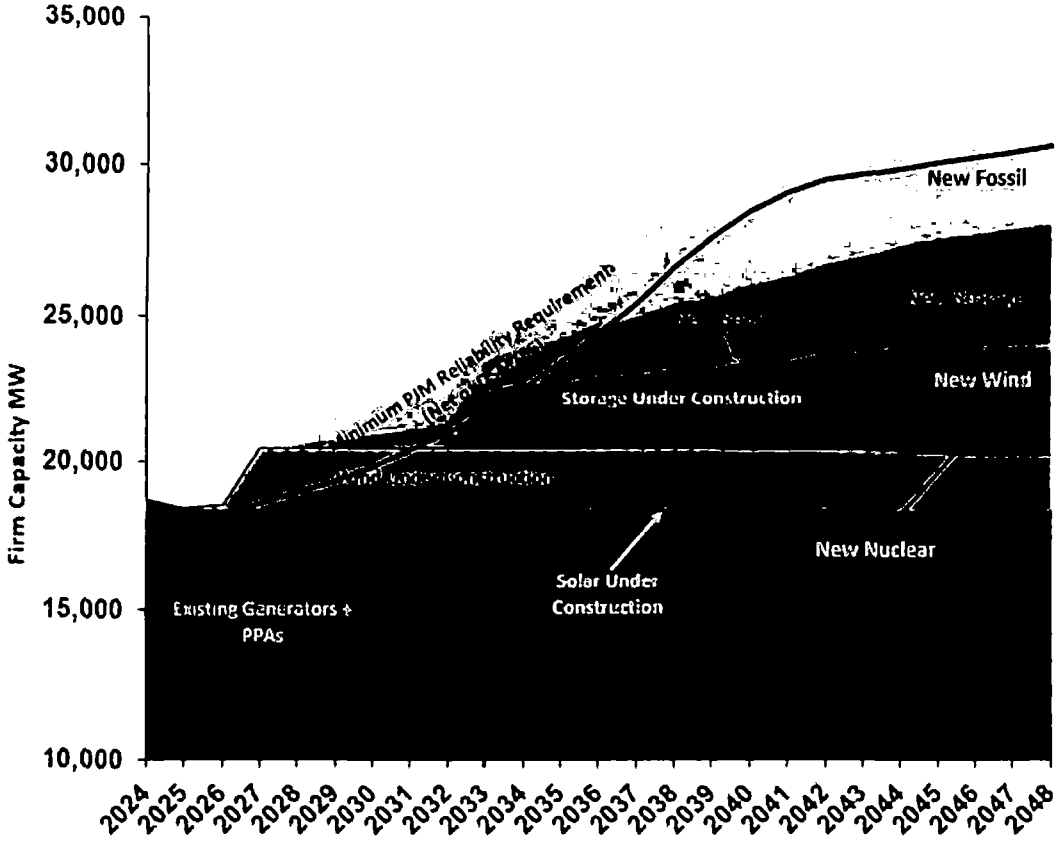
Appendix 5T: Winter Capacity Charts
Plan B