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May 29, 2020

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

RE: South Carolina Energy Freedom Act (House Bill 3659) Proceeding Related to S.C. Code Ann. Section 58-37-40 and Integrated Resource Plans for Dominion Energy South Carolina, Incorporated
Docket No. 2019-226-E

Dear Ms. Boyd:

On February 28, 2020, in the above-referenced docket, Dominion Energy South Carolina, Inc. ("DESC") filed its 2020 Integrated Resource Plan ("2020 IRP"). The purpose of this filing is to correct certain typos on pages 11 and 45 and to correct certain information in the tables on pages 50 and 51 of the 2020 IRP. To that end, enclosed for filing are corrected pages 11, 45, 50 and 51, which DESC requests be substituted for the original pages in its 2020 IRP.

On the attached corrected page 11, DESC has replaced the word "Load" with the word "Low" in the title of the table on that page, and has deleted the words "that result" in the sentence immediately preceding the table such that it now reads, "The changes in sales and peak demands from the base case are shown in the following table."

On the attached corrected page 45, in the second cell under "Resource Plan ID" in the first table on that page, DESC has replaced "RP" with "RP2."

On the attached corrected pages 50 and 51 of the 2020 IRP, DESC has revised the table on each page to replace "SCE&G" with "DESC" in the title line of the table.

On the attached corrected page 51, DESC has revised the table on that page to display the correct figures in row 5 labeled "Existing Solar," row 7 labeled "Solar Plant," row 8 labeled "Peaking/Intermediate," row 9 labeled "Baseload," row 10 labeled "Retirements," row 11 labeled "Total System Capacity," row 13 labeled "Total Production Capability," row 14 labeled "Margin (L13-L3)," and row 15 labeled "% Reserve Margin (L14/L3)."

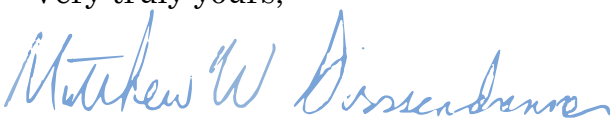
More specifically, the following changes were made:

1. On row 5 labeled "Existing Solar," the totals in the "S" columns for years 2027 through 2034 have increased as a result of the changes to row 7 described below.
2. On row 7 labeled "Solar Plant," DESC added 4.4 MW of solar plant in the columns labeled "2027 S" and "2028 S," deleted the 8 MW of solar plant in the column labeled "2029 S," and revised the solar plant in the columns labeled "2030 S," "2031 S," "2032 S," "2033 S," and "2034 S" to be 8.8 MW instead of 8 MW. These additions and revisions reflect that additional solar is given credit for 8.8% of its nameplate capacity during summer peaks.
3. On row 8 labeled "Peaking/Intermediate," DESC entered a value of "523 MW" for the column labeled "2028 W" and a value of "-38 MW" for the column labeled "2029 S." These additions reflect that a portion of the added capacity is a peaking resource with a winter capacity of 523 MW and a summer capacity that is 38 MW less than the winter capacity, e.g., 485 MW.
4. On row 9 labeled "Baseload," DESC entered a revised value of "553 MW" for the column labeled "2028 W" and a value of "-19 MW" for the column labeled "2029 S." The addition and the revision reflect that a portion of the added capacity is a base resource with a winter capacity of 553 MW and a summer capacity that is 19 MW less than the winter capacity, e.g., 534 MW.
5. On row 10 labeled "Retirements," DESC entered a value of "5 MW" for the column labeled "2029 S." This addition reflects that the retired capacity has a summer capacity that is 5 MW lower than its winter capacity.
6. On row 11 labeled "Total System Capacity," the totals in the "S" columns have increased for years 2027 through 2028 and decreased for years 2029 through 2034 as a result of the changes in rows 5 through 10.
7. On row 13 labeled "Total Production Capability," the totals in the "S" columns have increased for years 2027 through 2028 and decreased for years 2029 through 2034 as a result of the changes in rows 5 through 10.
8. On row 14 labeled "Margin (L13-L3)," the totals in the "S" columns have increased for years 2027 through 2028 and decreased for years 2029 through 2034 as a result of the changes in rows 5 through 10.
9. On row 15 labeled "% Reserve Margin (L14/L3)," the percentages have been adjusted to reflect the revisions to the totals on row 14.

By copy of this letter, we are providing the South Carolina Office of Regulatory Staff and the other parties of record with a copy of the corrected pages 11, 45, 50 and 51 of the 2020 IRP.

If you have any questions or concerns, please do not hesitate to contact us.

Very truly yours,



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MWG/kms
Attachments

cc: Dawn Hipp
M. Anthony James
Jeffrey M. Nelson, Esquire
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Richard L. Whitt, Esquire
Robert Guild, Esquire
Dori Jaffe, Esquire
Carri Grube – Lybarker, Esquire
(all via electronic mail w/attachments)

the detail behind the 2.7% growth rate, the residential and commercial customer growth rates were unusually high, due in part to the housing bubble leading to the recession. Also, the growth in wholesale sales was unreasonable as a proxy for the future because of changes in that class. When the 2.7% was adjusted for these components, the growth rate dropped to 1.7% and was selected as the high growth rate for this scenario analysis. While it is certainly true that DESC's sales could grow less than the low rate of 0.25% or more than the high rate of 1.7%, these rates represent reasonable ranges for the sales forecast. The changes in sales and peak demands from the base case are shown in the following table.

Annual Energy Forecast and Seasonal Peak Demand Change from Base Forecast for High and Low DSM							
High Scenario: Change from Base				Low Scenario: Change from Base			
Year	Annual Sales GWh	Peak Demands Summer MW	Peak Demands Winter MW	Year	Annual Sales GWh	Peak Demands Summer MW	Peak Demands Winter MW
2020	0.0	0.0	0.0	2020	0.0	0.0	0.0
2021	297.9	59.9	60.9	2021	-49.8	-10.0	-10.2
2022	598.0	121.4	123.3	2022	-99.2	-20.1	-20.5
2023	905.1	184.2	186.4	2023	-149.1	-30.4	-30.7
2024	1214.1	247.7	251.6	2024	-198.6	-40.5	-41.1
2025	1531.5	313.2	318.3	2025	-248.7	-50.9	-51.7
2026	1856.1	380.1	386.5	2026	-299.2	-61.3	-62.3
2027	2186.3	448.6	456.1	2027	-349.9	-71.8	-73.0
2028	2521.5	518.6	527.1	2028	-400.7	-82.4	-83.8
2029	2864.6	589.7	602.6	2029	-451.9	-93.0	-95.1
2030	3227.9	665.7	681.2	2030	-505.5	-104.2	-106.7
2031	3602.1	745.0	762.3	2031	-560.0	-115.8	-118.5
2032	3993.9	826.6	845.3	2032	-616.3	-127.6	-130.4
2033	4394.6	910.6	931.2	2033	-673.2	-139.5	-142.7
2034	4804.4	996.9	1019.1	2034	-730.6	-151.6	-155.0

C. Wholesale Sales Scenario Analysis

Wholesale energy sales represent about 3.6% of the Company's total sales. Wholesale customers are served by the Company through negotiated long-term power supply contracts. For periods of time beyond the terms of the existing long-term power supply contracts, the Company has to compete with other power suppliers for the wholesale customers' business. The

vii. Resource Plan Rankings by Gas Price and CO_2 Price

The following tables summarizes the 40 year levelized NPV cost results for all eight resource plans under the three different gas price cases and two different CO_2 price cases. (1 - Green= Least cost, 2 – Blue = Second Lowest and 8 - Orange = Highest cost)

Resource Plan Levelized NPV Rankings for Medium DSM

Resource Plan ID	Resource Plan Name	$0/ton CO_2, Low Gas	$0/ton CO_2, Base Gas	$0/ton CO_2, High Gas	$25/ton CO_2, Low Gas	$25/ton CO_2, Base Gas	$25/ton CO_2, High Gas
RP1	CC	6	5	5	7	6	6
RP2	ICT	1	1	2	3	4	3
RP3	Retire Wateree	5	6	7	4	3	5
RP4	Retire McMeekin	2	3	4	6	7	8
RP5	Solar + Storage	8	7	6	8	8	7
RP6	Solar	4	4	3	5	5	4
RP7	Solar PPA + Storage	3	2	1	2	2	2
RP8	Retire Coal	7	8	8	1	1	1

Resource Plan Levelized NPV for Medium DSM ($000)

Resource Plan ID	Resource Plan Name	$0/ton CO_2, Low Gas	$0/ton CO_2, Base Gas	$0/ton CO_2, High Gas	$25/ton CO_2, Low Gas	$25/ton CO_2, Base Gas	$25/ton CO_2, High Gas
RP1	CC	$1,166,528	$1,249,160	$1,427,424	$1,385,375	$1,469,436	$1,668,590
RP2	ICT	$1,145,532	$1,231,667	$1,416,354	$1,370,853	$1,461,736	$1,665,599
RP3	Retire Wateree	$1,165,235	$1,251,077	$1,444,505	$1,372,378	$1,460,334	$1,666,688
RP4	Retire McMeekin	$1,154,191	$1,239,802	$1,425,558	$1,380,307	$1,470,231	$1,675,337
RP5	Solar + Storage	$1,186,034	$1,266,727	$1,435,093	$1,394,516	$1,475,915	$1,669,182
RP6	Solar	$1,163,394	$1,246,165	$1,423,590	$1,378,987	$1,465,797	$1,665,995
RP7	Solar PPA + Storage	$1,154,889	$1,236,518	$1,413,532	$1,370,024	$1,455,686	$1,654,813
RP8	Retire Coal	$1,183,714	$1,267,624	$1,467,499	$1,356,160	$1,438,706	$1,646,153

The following resource plan is the least cost resource plan.

Resource Plan 2

DESC Forecast of Summer and Winter Loads and Resources - 2020 IRP

(MW)

	YEAR	2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034	
		S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W
Load Forecast																															
1	Baseline Trend	4816	4891	4847	4948	4903	5003	4955	5037	4992	5089	5043	5143	5095	5197	5148	5249	5202	5301	5252	5351	5301	5408	5357	5465	5412	5518	5467	5574	5520	5627
2	EE Impact	0	0	0	-24	-24	-48	-50	-73	-76	-97	-102	-121	-128	-147	-155	-172	-183	-199	-211	-199	-211	-199	-211	-199	-211	-199	-211	-199	-211	-199
3	Gross Territorial Peak	4816	4891	4847	4924	4879	4955	4905	4964	4916	4992	4941	5022	4967	5050	4993	5077	5019	5102	5041	5152	5090	5209	5146	5266	5201	5319	5256	5375	5309	5428
System Capacity																															
4	Existing	5689	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915
5	Existing Solar	263	0	329	0	448	0	448	0	448	0	448	0	448	0	448	0	448	0	448	0	448	0	448	0	448	0	448	0	448	0
6	Demand Response	227	224	228	226	229	228	230	230	231	234	232	239	233	249	234	261	235	275	236	276	237	277	238	278	239	279	240	280	241	281
	Additions:																														
7	Solar Plant	67	0	118	0																										
8	Peaking/Intermediate																														
9	Baseload																														
10	Retirements	-25																													
11	Total System Capacity	6220	6139	6340	6141	6341	6143	6342	6145	6343	6149	6344	6154	6345	6164	6346	6176	6347	6190	6348	6191	6349	6192	6350	6193	6351	6194	6352	6195	6353	6196
12																															
13	Total Production Capability	6220	6139	6340	6141	6341	6143	6342	6145	6343	6149	6344	6154	6345	6164	6346	6176	6347	6190	6348	6191	6349	6192	6350	6193	6351	6194	6352	6195	6353	6196
Reserves																															
14	Margin (L13-L3)	1404	1248	1493	1217	1462	1188	1436	1182	1426	1157	1403	1133	1378	1113	1353	1100	1327	1089	1306	1040	1258	983.7	1203	927.7	1149	875.7	1095	820.7	1043	768.7
15	% Reserve Margin (L14/L3)	29.2%	25.5%	30.8%	24.7%	30.0%	24.0%	29.3%	23.8%	29.0%	23.2%	28.4%	22.6%	27.7%	22.0%	27.1%	21.7%	26.4%	21.3%	25.9%	20.2%	24.7%	18.9%	23.4%	17.6%	22.1%	16.5%	20.8%	15.3%	19.7%	14.2%

New resources are added to meet either a 12% summer reserve margin or a 14% winter reserve margin. Because of the higher loads in the winter and 972 MW of solar that contribute some capacity to the summer reserves but not in the winter, the need for winter reserves drives the need to add new capacity. Even then, with just a 0.7% peak load growth rate, no new resources are added until 2035 which is outside the fifteen-year window shown above.

The following plan has the lowest CO_2.

Resource Plan 8

DESC Forecast of Summer and Winter Loads and Resources - 2020 IRP Update

(MW)

	YEAR	2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034	
		S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W
Load Forecast																															
1	Baseline Trend	4816	4891	4847	4948	4903	5003	4955	5037	4992	5089	5043	5143	5095	5197	5148	5249	5202	5301	5252	5351	5301	5408	5357	5465	5412	5518	5467	5574	5520	5627
2	EE Impact	0	0	0	-24	-24	-48	-50	-73	-76	-97	-102	-121	-128	-147	-155	-172	-183	-199	-211	-199	-211	-199	-211	-199	-211	-199	-211	-199	-211	-199
3	Gross Territorial Peak	4816	4891	4847	4924	4879	4955	4905	4964	4916	4992	4941	5022	4967	5050	4993	5077	5019	5102	5041	5152	5090	5209	5146	5266	5201	5319	5256	5375	5309	5428
System Capacity																															
4	Existing	5689	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5664	5915	5446	5697	5394	5697	5394	5697	5494	5797	5494	5797	5594	5897
5	Existing Solar	263	0	329	0	448	0	448	0	448	0	448	0	448	0	448	0	452	0	456	0	456	0	465	0	474	0	483	0	492	0
6	Demand Response	227	224	228	226	229	228	230	230	231	234	232	239	233	249	234	261	235	275	236	276	237	277	238	278	239	279	240	280	241	281
	Additions:																														
7	Solar Plant	67	0	118	0											4.4		4.4				8.8		8.8		8.8		8.8		8.8	
8	Peaking/Intermediate																		523	-38					100				100		100
9	Baseload																		553	-19											
10	Retirements	-25																	-1294	5											
11	Total System Capacity	6220	6139	6340	6141	6341	6143	6342	6145	6343	6149	6344	6154	6345	6164	6350	6176	6355	5972	6086	5973	6096	5974	6106	6075	6216	6076	6226	6177	6335	6278
12																															
13	Total Production Capability	6220	6139	6340	6141	6341	6143	6342	6145	6343	6149	6344	6154	6345	6164	6350	6176	6355	5972	6086	5973	6096	5974	6106	6075	6216	6076	6226	6177	6335	6278
Reserves																															
14	Margin (L13-L3)	1404	1248	1493	1217	1462	1188	1436	1182	1426	1157	1403	1133	1378	1113	1357	1100	1336	870.7	1045	821.7	1006	765.7	959.9	809.7	1015	757.7	969.5	802.7	1026	850.7
15	% Reserve Margin (L14/L3)	29.2%	25.5%	30.8%	24.7%	30.0%	24.0%	29.3%	23.8%	29.0%	23.2%	28.4%	22.6%	27.7%	22.0%	27.2%	21.7%	26.6%	17.1%	20.7%	15.9%	19.8%	14.7%	18.7%	15.4%	19.5%	14.2%	18.4%	14.9%	19.3%	15.7%