

South Carolina Electric and Gas Company
Planned Transmission Projects \$2M and above Total
5 Year Budget

Queensboro 115 kV Switching Station: Construct

Project ID

0062A,B,C,D

Project Description

Build 4-terminal 115 kV switching station at Queensboro substation. Terminate the existing Queensboro – St. Andrews, Church Creek – Queensboro, Queensboro – Ft. Johnson Road, and Queensboro – Bayfront 115 kV lines into Queensboro Switching Station.

Project Need

System load growth in Church Creek, Faber Place and James Island areas require increased transmission capacity from the Charleston Peninsula and reduces exposure to customers in the area.

Project Status

Complete

In-Service Date

3/31/18

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$4,000,433	\$734,901	\$0	\$0	\$0	\$0	\$4,735,334

*Total Amount applied to 2018 Rate Base Calculation

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**St. George – Summerville 230 kV #1 Lines: Upgrade #1 / Construct
#2 SPDC B1272 ACSR**

Project ID

94P,1,2,4

Project Description

Upgrade St. George to Summerville 230 kV to SPDC Bundled 1272 ACSR conductor, adding an additional line, the St. George – Summerville 230 kV #2.

Project Need

System load growth in the Charleston and outlying areas requires upgraded 230 kV source.

Project Status

Complete

In-Service Date

5/30/2018

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$45,171,423	\$11,253,390	\$0	\$0	\$0	\$0	\$56,424,813

*Total Estimated Amount to be applied to 2018 Rate Base Calculation

South Carolina Electric and Gas Company
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Urquhart 115 kV SS: Modify From Ring Bus to Straight Bus; includes new switchhouse

Project ID

1060K

Project Description

Modify ring bus configuration to straight bus configuration and replace switch house and relays at the Urquhart substation

Project Need

Substation Maintenance and Equipment Upgrade

Project Status

In Progress

Planned In-Service Date

5/31/2018

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$4,101,559	\$1,578,203	\$0	\$0	\$0	\$0	\$5,679,762

*Total Estimated Amount to be applied to 2018 Rate Base Calculation

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Hopkins 230/115 kV Sub: Install 2nd Autobank

Project ID

5386C

Project Description

Install a second autotransformer at Hopkins with a high and low side PRCB, along with back to back bus tie breakers.

Project Need

System load growth in the Hopkins and Eastover areas require additional transmission capacity. This project is required to meet NERC TPL standards and SCE&G's Internal Planning Criteria.

Project Status

In Progress

Planned In-Service Date

5/31/2018

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$3,667,651	\$432,349	\$0	\$0	\$0	\$0	\$4,100,000

*Total Estimated Amount to be applied to 2018 Rate Base Calculation

South Carolina Electric and Gas Company
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Faber Place - Hagood 115 kV #2 Line: Construct

Project ID

1721K,M,N

Project Description

Construct Faber Place to Hagood 115 kV #2 line with 1272 ACSR.

Project Need

System load growth in the Charleston area requires additional 115 kV transmission capacity.

Project Status

In Progress

Planned In-Service Date

5/31/2018

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$1,989,605	\$1,117,480	\$0	\$0	\$0	\$0	\$3,107,085

*Total Amount applied to 2018 Rate Base Calculation

South Carolina Electric and Gas Company
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Faber Place – Charlotte Street 115 kV Line Upgrade

Project ID

1721L

Project Description

Upgrade the Faber Place to Hagood Junction section of the Faber Place – Charlotte Street 115 kV line to 1272 ACSR or equivalent capacity conductor.

Project Need

System load growth in the Charleston area requires additional 115 kV transmission capacity.

Project Status

In Progress

Planned In-Service Date

6/30/2018

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$1,211,700	\$908,300	\$0	\$0	\$0	\$0	\$2,120,000

*Total Amount applied to 2018 Rate Base Calculation

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**Dunbar Road – Orangeburg East 115 kV: Rebuild SPDC Bundled 1272
ACSR**

Project ID

0094D1,9

Project Description

Tear out and rebuild existing 115 kV and 230 kV lines on the transmission corridor between Dunbar Road and Orangeburg East substations as SPDC bundled 1272 ACSR construction.

Project Need

Improve north-south and south-north power transfer capability while meeting NERC TPL standards and SCE&G's Internal Planning Criteria.

Project Status

In Progress

Planned In-Service Date

7/30/2018

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$18,372,010	\$2,612,019	\$0	\$0	\$0	\$0	\$20,984,029

*Total Amount applied to 2018 Rate Base Calculation

South Carolina Electric and Gas Company
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VCS2 – St. George 230 kV #1 Lines: Construct

Project ID

0094D6, 00948A, 0094D9, 0094D13, 0094D21, 0094D22, 0094D23, 0094D24, 0094D25, 0094P4, 0094P2, 0094U

Project Description

Tear out and rebuild existing 115 kV and 230 kV lines on the transmission corridor between the Riverbanks Zoo and Dunbar Road substation to SPDC bundled 1272 ACSR construction.

Project Need

Improve north-south and south-north power transfer capability while meeting NERC TPL standards and SCE&G's Internal Planning Criteria.

Project Status

In Progress

Planned In-Service Date

11/30/2018

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$45,329,739	\$15,274,283	\$0	\$0	\$0	\$0	\$60,604,022

*Total Amount applied to 2018 Rate Base Calculation

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Williams – Cainhoy 115 kV: Rebuild SPDC B795 ACSR (115 kV & 230 kV)

Project ID

2499K, 2499L

Project Description

Rebuild the existing AMW Cainhoy 115 kV line to steel pole SPDC construction using B795 ACSR for both circuits. The Williams – Cainhoy 115 kV #1 line will be built insulated to 115 kV, and the Williams – Cainhoy 115 kV #2 line will be built insulated to 230 kV for future expansion capability. Total line length is 8.5 miles.

Project Need

System load growth in the Cainhoy, Hamlin, Mt Pleasant, and Thomas Island areas require additional 230/115 kV transformation. This project is required to meet NERC TPL standards and SCE&G's Internal Planning Criteria.

Project Status

In Progress

Planned In-Service Date

12/3/2018

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$543,185	\$25,506,815	\$0	\$0	\$0	\$0	\$26,050,000

*Total Amount applied to 2018 Rate Base Calculation

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Church Creek – Faber Place 230 kV & 115 kV Lines: Rebuild Ashley River Crossing

Project ID
1730A

Project Description
Rebuild the Church Creek – Faber Place 230 kV and 115 kV section of lines at the Ashley River crossing, consisting of four spans which will be rebuilt to SPDC steel pole construction.

Project Need
Structures are in need of replacement. Wood poles will be replaced with steel pole construction.

Project Status
Planned

Planned In-Service Date
5/31/2019

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$29,698	\$0	\$2,100,000	\$0	\$0	\$0	\$2,129,698

*Total Estimated Amount to be applied to 2019 Rate Base Calculation

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**Urquhart – Graniteville #2 230 kV Line: Rebuild existing 115kV SPDC
B1272**

Project ID

7973A – 7973N

Project Description

Rebuild current Urquhart – Graniteville 115 kV line to 230 kV SPDC B1272 ACSR construction in order to upgrade the Urquhart – Graniteville #2 230 kV line.

Project Need

Load growth in the Aiken area requires additional transmission capacity. This project is required to meet NERC TPL standards and SCE&G's Internal Planning Criteria.

Project Status

In Progress

Planned In-Service Date

5/31/2019

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$561,522	\$0	\$15,707,500	\$0	\$0	\$0	\$16,269,022

*Total Estimated Amount to be applied to 2019 Rate Base Calculation

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Graniteville – South Augusta 230 kV Tieline: Construct

Project ID

7973A – 7973N

Project Description

Rebuild current Urquhart – Graniteville 115 kV line to 230 kV SPDC B1272 ACSR construction in order to upgrade create the Graniteville – South Augusta 230 kV SCE&G/SOCO Tieline. The existing Urquhart – Graniteville #2 230 kV line will be converted to 115 kV and re-connected to the newly built South Augusta 115 kV SOCO line to create the Graniteville – South Augusta 115 kV tieline.

Project Need

Load growth in the Aiken area requires additional transmission capacity. Constructing a new 230 kV line from South Augusta to Graniteville will provide an additional source needed during contingencies and increase the transfer capability between SCE&G and Southern Company. Project unloads a highly loaded transmission line on the SCE&G/Southern interface and several internal SCE&G lines. This project is required to meet NERC TPL standards and SCE&G’s Internal Planning Criteria.

Project Status

In Progress

Planned In-Service Date

6/1/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$561,522	\$0	\$0	\$15,707,500	\$0	\$0	\$16,269,022

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

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Hugh Leatherman 115 kV Tap: Construct

Project ID

007977D

Project Description

Construct a new 115 kV tap line from the Charlotte Street – Faber Place 115 kV line to the new Hugh Leatherman substation with 1272 ACSR conductor. Route will be determined by the siting study that is currently underway. Route assumed to be approximately 1.6 miles.

Project Need

Electric Service Contract.

Project Status

Planned

Planned In-Service Date

5/31/2019

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$0	\$0	\$2,100,000	\$0	\$0	\$0	\$2,100,000

*Total Amount applied to 2019 Rate Base Calculation

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Thomas Island – Jack Primus 115 kV Line: Construct

Project ID

0270B,G

Project Description

Construct a new 115 kV line from the Thomas Island substation to the new Jack Primus substation with 1272 ACSR conductor. Total line length approximately 4 miles.

Project Need

System load growth in the Thomas Island area requires additional transmission capacity.

Project Status

Planned

Planned In-Service Date

8/1/2019

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$3,784,360	\$0	\$5,722,400	\$0	\$0	\$0	\$9,506,760

*Total Amount applied to 2019 Rate Base Calculation

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Burton – St. Helena Island 115 kV: Replace 19 Structures and Groundline Remediation

Project ID

006072A

Project Description

Replace several structures (direct embed galvanized steel structures) with new galvanized steel vibratory caissons and galvanic cathodic protection. Apply galvanic cathodic protection to other steel structures on the line that need corrosion protection.

Project Need

Transmission Maintenance and Equipment Upgrade

Project Status

Planned

Planned In-Service Date

12/31/2019

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$724,413	\$0	\$2,200,000	\$0	\$0	\$0	\$2,924,413

*Total Estimated Amount to be applied to 2019 Rate Base Calculation

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Pepperhill – Summerville 230 kV: Construct

Project ID

2601A – F

Project Description

Construct a new 230 kV line from Pepperhill to Summerville SPDC with B1272 ACSR. The existing Williams – Canadys 230 kV line will be re-terminated to Pepperhill and Faber Place to create Canadys – Faber Place 230 kV line and Williams – Pepperhill 230 kV line.

Project Need

System load growth in the low country require additional transmission capacity. This project is required to meet NERC TPL standards and SCE&G’s Internal Planning Criteria.

Project Status

Planned

Planned In-Service Date

5/1/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$272,658	\$0	\$0	\$14,070,000	\$0	\$0	\$14,342,658

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

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Canadys 230 kV: Add Back-Back Bus Tie Breakers

Project ID

6074A, 6075A

Project Description

Upgrade the 230kV bus from single 1272 ACSR to bundled 1272 ACSR. Install back to back 230 kV bus tie breakers and re-terminate existing lines into substation.

Project Need

The 230 kV bus upgrades are required for additional load growth in the southern portion of the SCE&G system, and back-to-back bus tie breakers are required for system reliability improvements.

Project Status

Planned

Planned In-Service Date

5/1/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$38,003	\$0	\$0	\$4,300,000	\$0	\$0	\$4,338,003

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

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Lake Murray – Red Bank 115 kV Line: String 1272 ACSR on existing structures, construct SPDC 1272 ACSR elsewhere

Project ID
007106D – G

Project Description

Install a new circuit of 1272 ACSR wire from Lake Murray - Lexington Jct. Conductor will be installed on the available side of the Lake Murray - Gilbert 115 kV structures which were designed to be double circuit when it was originally built. Rebuild 115 kV SPDC from Lexington Junction to Lexington Industrial Park to accommodate the Lake Murray - Michelin 115 kV and Lexington Junction - Lexington Industrial Park 115 kV. Upgrade Lexington Junction - Michelin conductor to 1272 ACSR.

Project Need

System growth in the Lexington and Red Bank areas requires additional 115 kV capacity and an additional transmission path to increase reliability.

Project Status

Planned

Planned In-Service Date

5/1/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$0	\$0	\$0	\$5,675,000	\$0	\$0	\$5,675,000

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

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Williams Street – Park Street 115 kV: Construct

Project ID

007971B,D

Project Description

Design, purchase, and install a 115 kV line between Williams Street and Park Street substations.

Project Need

System load growth in the downtown Columbia area requires additional transmission capacity.

Project Status

Planned

Planned In-Service Date

5/31/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$124,780	\$0	\$0	\$2,350,000	\$0	\$0	\$2,474,780

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

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Lake Murray – Harbison 115 kV: Re-terminate Saluda Hydro – Harbison and rebuild SPDC

Project ID

0203B, 0203C

Project Description

Re-terminate the Saluda Hydro – Harbison 115 kV line to Lake Murray substation in preparation for the SPDC rebuild of the Lake Murray – Harbison 115 kV which will add an additional line to create Saluda Hydro – Denny Terrace 115 kV line.

Project Need

System growth in the Irmo, Harbison, Piney Woods Road, and Kingswood areas requires additional 115 kV capacity and transmission path to increase reliability.

Project Status

In Progress

Planned In-Service Date

6/30/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$1,396,234	\$0	\$0	\$7,000,000	\$0	\$0	\$8,396,234

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

South Carolina Electric and Gas Company
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Burton-Yemassee 115 kV #2 Line Rebuild SPDC B795 ACSR

Project ID

1268A, 1268C

Project Description

Yemassee-Burton 115 kV Line #2: Rebuild 115 kV SPDC using B795 ACSR (line length 21.24 miles).

Project Need

System load growth in the Burton area requires additional transmission capacity from the Yemassee 230/115 kV substation and added transmission path to increase reliability.

Project Status

In Progress

Planned In-Service Date

6/30/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$12,048,133	\$0	\$0	\$38,000,000	\$0	\$0	\$50,048,133

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

South Carolina Electric and Gas Company
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Coit – Gills Creek 115 kV Line: Construct

Project ID

5392A

Project Description

Construct a new 115 kV tie line from Coit substation to the Gills Creek substation.

Project Need

System growth in the Eastern Columbia and Garners Ferry areas requires additional 115 kV capacity and transmission path to increase reliability.

Project Status

Planned

Planned In-Service Date

12/1/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$0	\$0	\$0	\$2,500,000	\$0	\$0	\$2,500,000

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

South Carolina Electric and Gas Company
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Bluffton – Santee 115 kV Tie Line Construct

Project ID

7101A, 7101B

Project Description

Construct a new 115 kV tie line from SCE&G Bluffton substation to SCPSA Bluffton substation. Total line length approximately 1.5 miles.

Project Need

This line is needed to reduce outage durations for planned outages and emergency situations for SCE&G’s Bluffton, Hardeeville and Pritchardville substations.

Project Status

Planned

Planned In-Service Date

12/31/2020

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$4,538	\$0	\$1,100,000	\$2,000,000	\$0	\$0	\$3,104,538

*Total Estimated Amount to be applied to 2020 Rate Base Calculation

South Carolina Electric and Gas Company
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Canadys – Ritter 230 kV: Rebuild existing 115kV SPDC B1272

Project ID

6706A – C

Project Description

Construct a new 230 kV line from Canadys to Ritter SPDC with B1272 ACSR by rebuilding the existing 115 kV line in this corridor.

Project Need

System load growth in the low country require additional transmission capacity. This project is required to meet NERC TPL standards and SCE&G's Internal Planning Criteria.

Project Status

Planned

Planned In-Service Date

5/1/2022

Estimated Project Cost

Previous	2018	2019	2020	2021	2022	Total*
\$0	\$0	\$0	\$0	\$0	\$26,700,000	\$26,700,000

*Total Estimated Amount to be applied to 2022 Rate Base Calculation