



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

May 17, 2022

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

Re: Docket No. E-7, Sub 1263 – Application of Duke Energy Carolinas, LLC, Pursuant to N.C.G.S. 62-133.2 and Commission Rule R8-55 Relating to Fuel and Fuel-Related Charge Adjustments for Electric Utilities

Dear Ms. Dunston:

Attached for filing on behalf of the Public Staff in the above-referenced docket are the following:

1. Notice of Affidavit;
2. Affidavit of June Chiu, Financial Analyst III, Accounting Division; and
3. Joint Testimony and Exhibits of Evan D. Lawrence and Dustin R. Metz, Utilities Engineers, Electric Section, Energy Division.

By copy of this letter, I am forwarding a copy to all parties of record by electronic delivery.

Sincerely,

Electronically submitted  
s/ William E. H. Creech  
Staff Attorney  
[zeke.creech@psncuc.nc.gov](mailto:zeke.creech@psncuc.nc.gov)

**Attachments**

Executive Director  
(919) 733-2435

Accounting  
(919) 733-4279

Consumer Services  
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**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-7, SUB 1263

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of Duke Energy Carolinas,	)	
LLC, Pursuant to N.C.G.S. 62-133.2 and	)	NOTICE OF AFFIDAVIT
Commission Rule R8-55 Relating to Fuel	)	
and Fuel-Related Charge Adjustments for	)	
Electric Utilities	)	

NOW COMES THE PUBLIC STAFF - North Carolina Utilities Commission,  
by and through its Executive Director, Christopher J. Ayers, as constituted by  
N.C. Gen. Stat. § 62-15, and gives notice that the Affidavit of:

June Chiu, Financial Analyst III, Accounting Division  
Public Staff - North Carolina Utilities Commission  
430 North Salisbury Street - Dobbs Building  
4326 Mail Service Center  
Raleigh, North Carolina 27699-4300

will be used in evidence at the hearing in this docket scheduled for June 7, 2022,  
pursuant to N.C.G.S. § 62-68. The affiant will not be called to testify orally and will  
not be subject to cross-examination unless an opposing party or the Commission  
demands the right of cross-examination by notice mailed or delivered to the  
proponent at least five days prior to the hearing, pursuant to N.C.G.S. § 62-68.

THEREFORE, the Public Staff moves that the Affidavit of June Chiu be  
admitted into evidence in the absence of notice pursuant to N.C.G.S. § 62-68.

OFFICIAL COPY

May 17 2022



Respectfully submitted this the 17th day of May, 2022.

PUBLIC STAFF  
Christopher J. Ayers  
Executive Director

Lucy E. Edmondson  
Interim Chief Counsel

Electronically submitted  
/s/ William E. H. Creech  
Staff Attorney  
[zeke.creech@psncuc.nc.gov](mailto:zeke.creech@psncuc.nc.gov)

430 North Salisbury Street - Dobbs Building  
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Telephone: (919) 733-6110

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May 17 2022

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. E-7, SUB 1263

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Application of Duke Energy Carolinas, LLC,	)
Pursuant to N.C.G.S. § 62-133.2 and	)
Commission Rule R8-55 Relating to Fuel and	)
Fuel-Related Charge Adjustments for Electric	)
Utilities	)

AFFIDAVIT OF  
JUNE CHIU

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, June Chiu, first being duly sworn, do depose and say:

I am a Financial Analyst III in the Accounting Division of the Public Staff - North Carolina Utilities Commission. A summary of my duties, education, and experience is attached to this affidavit as Appendix A.

The purpose of my affidavit is to present the results of the Public Staff's investigation of the Experience Modification Factor (EMF) riders proposed by Duke Energy Carolinas, LLC (DEC or the Company) in this proceeding. The EMF riders are utilized to "true-up," by customer class, the recovery of fuel and fuel-related costs incurred during the test year. DEC's test year in this fuel proceeding is the twelve months ended December 31, 2021.

In its application, filed with supporting testimony on March 1, 2022, DEC proposed EMF increment riders in cents per kilowatt-hour (kWh), excluding the

North Carolina regulatory fee, for each North Carolina retail customer class, as follows:

Residential	0.3785 cents per kWh
General Service/Lighting	0.4625 cents per kWh
Industrial	0.4128 cents per kWh

On May 9, 2022, DEC filed the Direct Testimony of David B. Johnson and the Supplemental Testimony of Bryan L. Sykes with Revised Sykes Exhibits and supporting workpapers. Witness Sykes' supplemental testimony and revised exhibits reflect the impact of four updates to numbers presented in witness Sykes' direct exhibits and workpapers. They are as follows:

- (1) An update to the EMF increment to incorporate the fuel and fuel-related cost recovery balances for January 2022, pursuant to Commission Rule R8-55(d)(3). The reported under-recovery included in the update, although included in this proceeding, would be reviewed as part of next year's fuel and fuel-related cost proceeding;
- (2) An update to the production plant allocator used to allocate renewable and purchased power capacity costs to the North Carolina Retail jurisdiction to reflect the production plant allocation factor in the 2021 cost of service study, which provides a decrease in the under-recovery of the fuel costs. The Company had previously utilized the 2020 production plant allocation factor since the 2021 study was not complete;

- (3) An update to revise the coincidental peak data reported on Exhibit 4, which was not available at the time of the Company's initial filing in this docket. The coincidental peak data is informational and has no impact on proposed rates; and
- (4) A revision to the retail customer growth adjustment and the wholesale weather adjustment. The retail customer growth adjustment reflects the actual number of customers more accurately within the test period. This adjustment increases the EMF rate as proposed on the Sykes Revised Exhibit 3, which uses normalized test period sales. However, the wholesale weather adjustment does not impact proposed rates.

Revised Sykes Exhibit 1 sets forth the Company's revised proposed EMF increment riders in cents per kilowatt-hour (kWh), excluding the North Carolina regulatory fee, for each North Carolina retail customer class, as follows:

Residential	0.4863 cents per kWh
General Service/Lighting	0.6254 cents per kWh
Industrial	0.5726 cents per kWh

In witness Sykes' Revised Exhibits, DEC's proposed revised under-recovery of fuel for each of the North Carolina retail customer classes is as follows:

Residential	\$111,487,845
General Service/Lighting	\$145,085,337
Industrial	\$70,401,036

The revised riders were calculated by dividing the fuel cost under-recoveries by DEC's normalized test year N.C. retail sales of 22,926,377 megawatt-hours (MWh) for the residential class, 23,198,571 MWh for the general service/lighting class, and 12,293,985 MWh for the industrial class.

The Public Staff's investigation included investigative procedures intended to evaluate whether the Company properly determined its per books fuel and fuel-related costs and revenues during the test period. These procedures included a review of the Company's filing, prior Commission orders, the Monthly Fuel Reports filed by the Company with the Commission, and other Company data provided to the Public Staff. The Public Staff also reviewed certain specific types of expenditures impacting the Company's test year fuel and fuel-related costs, including reagents (limestone, ammonia, urea, etc.), renewable energy, and purchased power, as well as reviews of source documentation of fuel and fuel-related costs for certain selected Company generation resources. Performing the Public Staff's investigation required the review of numerous responses to written and verbal data requests, and several telephone conferences with Company representatives.

As a result of the Public Staff's investigation, I am recommending that DEC's EMF riders for each customer class be based on net fuel and fuel-related cost under-recoveries of \$111,487,845 for the residential class, \$145,085,337 for the general service/lighting class, and \$70,401,036 for the industrial class, and normalized North Carolina retail sales of 22,926,377 MWh for the residential class, 23,198,571 MWh for the general service/lighting class, and 12,293,985

MWh for the industrial class, as proposed by the Company. These amounts produce EMF increment riders for each North Carolina retail customer class as follows, excluding the regulatory fee:

Residential	0.4863 cents per kWh
General Service/Lighting	0.6254 cents per kWh
Industrial	0.5726 cents per kWh

I have provided these amounts to Public Staff witnesses Lawrence and Metz for incorporation into their recommended final fuel factor. The Public Staff also reserves its rights to review and audit the January 2022 fuel and fuel-related costs.

This completes my affidavit.

June Chiu  
June Chiu

Sworn to and subscribed before me  
this the 16 th day of May, 2022.

Jessica Heironimus  
Notary Public

My Commission Expires: May 10, 2023



## APPENDIX A

### JUNE CHIU

#### Qualifications and Experience

I graduated from Drake University with a master's degree in Business Administration. Prior to joining the Public Staff, I worked in the state government and corporate areas. My duties varied from performing audit engagements to supervision of accounting and internal controls and preparing SEC filings.

I joined the Public Staff in October 2017. I am responsible for (1) examining and analyzing testimony, exhibits, books and records, and other data presented by utilities and other parties under the jurisdiction of the Commission or involved in Commission proceedings, and (2) preparing and presenting testimony, exhibits, and other documents for presentation to the Commission.

I have performed audits and/or presented testimony and exhibits before the Commission for water and telecommunication cases involving Ridgecrest, Water Resources, Aqua, Lake Junaluska, Carolina Water Service Inc. of NC, JAARS, etc. I have participated in electric cases such as the Dominion Energy North Carolina 2019 general rate case, Duke Energy Carolinas, LLC's 2019 general rate case, Dominion Energy North Carolina fuel cases since 2019, Duke Energy Progress, LLC's REPS proceedings since 2020, and Duke Energy Carolinas, LLC's Fuel case since 2021.



BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1263

In the Matter of	)	JOINT TESTIMONY OF
Application of Duke Energy	)	EVAN D. LAWRENCE
Carolinas, LLC, Pursuant to N.C.G.S.	)	AND DUSTIN R. METZ
§ 62-133.2 and Commission Rule	)	PUBLIC STAFF – NORTH
R8-55 Relating to Fuel and Fuel-	)	CAROLINA UTILITIES
Related Charge Adjustments for	)	COMMISSION
Electric Utilities	)	

1    **Q.     MR. LAWRENCE, PLEASE STATE YOUR NAME AND ADDRESS**  
2           **FOR THE RECORD.**

3    A.     My name is Evan D. Lawrence. My business address is 430 North  
4           Salisbury Street, Raleigh, North Carolina.

5    **Q.     WHAT IS YOUR POSITION WITH THE PUBLIC STAFF?**

6    A.     I am an engineer with the Operations and Planning Section in the  
7           Energy Division of the Public Staff.

8    **Q.     WOULD YOU BRIEFLY DISCUSS YOUR EDUCATION AND**  
9           **EXPERIENCE?**

10   A.     My education and experience are summarized in Appendix A to this  
11          testimony.

12   **Q.     MR. METZ, PLEASE STATE YOUR NAME AND ADDRESS FOR**  
13          **THE RECORD.**

14   A.     My name is Dustin R. Metz. My business address is 430 North  
15          Salisbury Street, Raleigh, North Carolina.

16   **Q.     WHAT IS YOUR POSITION WITH THE PUBLIC STAFF?**

17   A.     I am an engineer with the Operations and Planning Section in the  
18          Energy Division of the Public Staff.

19   **Q.     WOULD YOU BRIEFLY DISCUSS YOUR EDUCATION AND**  
20          **EXPERIENCE?**

1 A. My education and experience are summarized in Appendix B to this  
2 testimony.

3 **Q. WHAT IS THE PURPOSE OF YOUR JOINT TESTIMONY?**

4 A. The purpose of our testimony is to present the results of the Public  
5 Staff's investigation and recommendations regarding the proposed  
6 fuel and fuel-related cost factors for the residential, general,  
7 service/lighting, and industrial customers of Duke Energy Carolinas,  
8 LLC (DEC or the Company), as set forth in the Company's  
9 application and testimony filed March 1, 2022, and additional direct  
10 testimony and supplemental testimony filed May 9, 2022.  
11 Additionally, our testimony: (1) highlights a concern relating to the  
12 Clemson Combined Heat and Power (CHP) steam sale contract,  
13 which has been raised in previous dockets; and (2) reports minor  
14 findings relating to the actual operations of and billing for the  
15 Clemson CHP in the test period.

16 **Q. WHAT ARE THE TEST AND BILLING PERIODS FOR THIS**  
17 **PROCEEDING?**

18 A. For this proceeding, the test period is January 1, 2021, through  
19 December 31, 2021, and the billing period is September 1, 2022,  
20 through August 31, 2023.

21 **Q. PLEASE DESCRIBE THE SCOPE OF THE PUBLIC STAFF'S**  
22 **INVESTIGATION.**

1 A. The Public Staff's investigation included a review of the Company's  
2 test period and projected fuel and fuel-related costs. The  
3 investigation also included a review of the following: (1) the  
4 Company's application, direct testimony, supplemental testimony,  
5 and responses to Public Staff data requests; (2) documents related  
6 to the performance of the Company's power plants, including specific  
7 performance of the Company's nuclear facilities and the Clemson  
8 CHP; (3) the Company's purchased power transactions; (4) the cost  
9 of renewable energy and associated fuel prices; and (5) the  
10 Company's coal, natural gas, nuclear, and reagent procurement  
11 practices and contracts.

12 **Q. PLEASE SUMMARIZE THE RESULTS OF YOUR**  
13 **INVESTIGATION AND YOUR RECOMMENDATIONS.**

14 A. For the test year, the Company achieved the nuclear capacity factor  
15 standard in Commission Rule R8-55(k) and appropriately calculated  
16 the proposed base system average fuel factor for the billing period.  
17 The Company's estimated proposed fuel and fuel-related cost  
18 factors in this proceeding are reasonable. We discuss factors that  
19 increased the price of fuels in the test year. During the test year,  
20 these factors resulted in a large under-collection of costs, and they  
21 continue to have significant impacts on commodity costs for present  
22 and future electric generation.

1    **Q.    DID THE COMPANY ACHIEVE THE STANDARDS OF**  
2                    **COMMISSION RULE R8-55(K) FOR THE TEST YEAR?**

3    A.    Yes. For the test year, the Company achieved the standards of  
4                    Commission Rule R8-55(k) by achieving an actual system-wide  
5                    nuclear capacity factor that exceeded the NERC (North American  
6                    Electric Reliability Corporation) weighted average nuclear capacity  
7                    factor. Additionally, the Company's two-year simple average of its  
8                    system-wide nuclear capacity factor exceeded the NERC weighted  
9                    average nuclear capacity factor.<sup>1</sup>

10   **Q.    DID THE PUBLIC STAFF REVIEW THE BILLING PERIOD OR**  
11                    **PROJECTED FUEL AND FUEL-RELATED COSTS AS SET**  
12                    **FORTH BY THE COMPANY IN THIS FILING?**

13   A.    Yes. The projected fuel and reagent costs are reasonable and were  
14                    calculated appropriately. The projected fuel and fuel-related costs  
15                    are impacted by fluctuations in the costs of nuclear fuel, coal, and  
16                    natural gas. DEC based its proposed fuel and fuel-related costs on a  
17                    93.94% system nuclear capacity factor, which the Company  
18                    anticipates for the billing period.

19   **Q.    PLEASE PROVIDE THE PROPOSED FUEL AND FUEL-RELATED**  
20                    **COST FACTORS.**

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<sup>1</sup> The Company's actual system nuclear capacity factor for the test period was 96.12%. In comparison, the most recent NERC five-year average weighted for the size and type of reactors in DEC's nuclear fleet was 92.10% during the test period.

1 A. Lawrence/Metz Exhibit 1 shows the proposed fuel and fuel-related  
2 cost factors. The Public Staff recommends approval of the fuel  
3 components and total fuel factors (excluding the regulatory fee),  
4 shown in Lawrence/Metz Exhibit 1, Table 1, effective for the twelve-  
5 month period beginning September 1, 2022.

6 Public Staff witness Chiu discusses the Public Staff's review of the  
7 test period Experience Modification Factor (EMF) and EMF interest  
8 in her affidavit, and her recommendations are incorporated in  
9 Lawrence/Metz Exhibit 1.

10 **Q. YOU STATED PREVIOUSLY THAT YOU REVIEWED TEST YEAR**  
11 **POWER PLANT PERFORMANCE. DID ANY PARTICULAR**  
12 **OUTAGES OR EVENTS OCCUR THAT YOU WOULD LIKE TO**  
13 **BRING TO THE COMMISSION'S ATTENTION?**

14 A. No. In previous orders,<sup>2</sup> the Commission instructed the Public Staff  
15 to continue to investigate and present its concerns to the  
16 Commission regarding test year outages. The Public Staff reviewed  
17 multiple outages that occurred during the test year, but this review  
18 did not raise any concerns that need to be presented to the  
19 Commission at this time.

20 **Q. HOW WERE THE BILLING PERIOD COSTS PROJECTED?**

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<sup>2</sup> Docket No. E-22, Sub 546, Order Approving Fuel Charge Adjustment, Evidence and Conclusions for Findings of Fact Nos. 6-9, p. 19, January 25, 2018; and Docket No. E-7, Sub 1163, Order Approving Fuel Charge Adjustment, Evidence and Conclusions for Findings of Fact Nos. 4-6, p. 28, August 20, 2018.

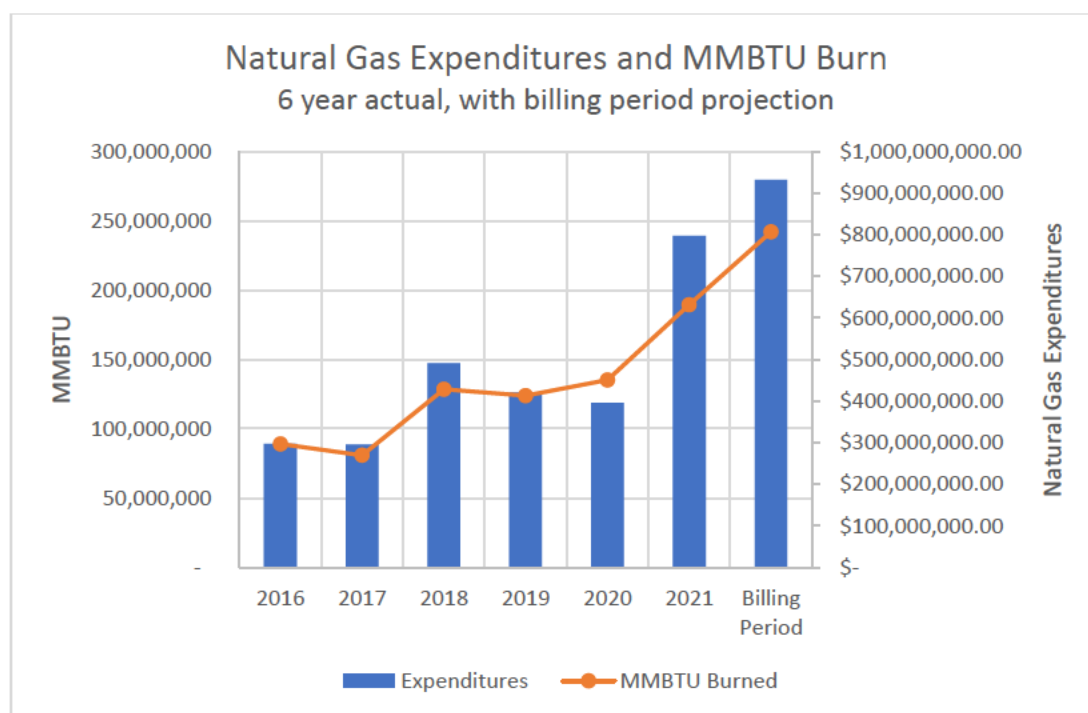
1 A. As previously noted, the billing period for this case is September 1,  
2 2022, through August 31, 2023. DEC developed the projections of  
3 fuel costs in December 2021 as part of preparing its application,  
4 testimony, and exhibits for initial filing in March 2022. In fuel  
5 application proceedings, DEC must make cost projections from 9 to  
6 21 months in advance. Commodity costs of fuels, transportation  
7 costs of fuels, plant dispatch and availability, fuel availability, and  
8 many other factors must be considered to develop the estimated  
9 prospective billing factors. In past years, future fuel costs were less  
10 volatile, and generally only severe weather events or extended plant  
11 outages caused significant cost fluctuations in the annual fuel riders.

12 **Q. DOES THE PUBLIC STAFF DISAGREE WITH THE COMPANY'S**  
13 **PROJECTED COSTS FOR THE BILLING PERIOD?**

14 A. No. The Company has projected costs for the billing period utilizing  
15 the uniform bill adjustment method it has used in previous years. This  
16 method includes using a production cost model which uses inputs  
17 such as the forward market price of fuel commodities, the fuel  
18 transportation costs, and expected plant operations to develop a  
19 scenario that is "most likely" to occur. However, the Public Staff feels  
20 it is important to highlight some of the dynamics that expose  
21 ratepayers to the risks of volatile fuel prices. Overall, fuel prices have  
22 been particularly volatile over the last year. The Company has  
23 increased its reliance on natural gas over the past several years,



1 exposing DEC to greater natural gas price volatility. Figure 1, below,  
 2 shows the amount of natural gas burned by DEC (in million British  
 3 thermal units (MMBTU)), compared to DEC expenditures on natural  
 4 gas for the years 2016-2021, as well as the billing period projection  
 5 for this proceeding. Lawrence/Metz Exhibit 2 includes Table 3 which  
 6 shows the actual values in Figure 1.



7  
 8 *Figure 1: DEC natural gas commodity expenditures and MMBTU burned*

9  
 10 **Q. PLEASE DISCUSS WHAT CONDITIONS HAVE CHANGED SINCE**  
 11 **DEC MADE ITS BILLING PERIOD PROJECTION.**

12 **A.** The most substantial impact to the annual fuel rider is the increased  
 13 price of natural gas for which DEC is seeking cost recovery in this

1 case. DEC witness Vederame's direct testimony, page 9, line 20,  
2 indicates that the Henry Hub forward price for the billing period was  
3 \$3.60/MMBTU. Currently, the Henry Hub forward price for the billing  
4 period is up to \$6.58/MMBTU as of May 16, 2022.<sup>3</sup> While the Public  
5 Staff does not expect natural gas prices to fall in line with witness  
6 Vederame's estimate during the billing period, the Company's  
7 hedging program is intended to help mitigate the disparity between  
8 projected and actual costs.

9 On November 5, 2021, in Docket No. E-22, Sub 605, Public Staff  
10 witness Lawrence filed testimony that discussed reasons why  
11 Virginia Electric and Power Company, d/b/a Dominion Energy North  
12 Carolina (DENC) had appropriately requested an increase to its fuel  
13 rates. At that time, the Public Staff and DENC recognized that natural  
14 gas prices were increasing and would continue to increase from the  
15 levels realized during much of 2020 and part of 2021. In his  
16 testimony, Witness Lawrence stated the following:

17 The Henry Hub natural gas price projections from the  
18 Energy Information Administration (EIA) Short-Term  
19 Energy Outlook, published October 13, 2021, project  
20 gas prices increasing to a monthly average peak of  
21 \$5.90/MMBTU in January 2022 with a gradual decline  
22 to an average of \$4.01/MMBTU for all of 2022. Both  
23 Duke Energy's and Dominion's confidential fuel  
24 forecasts trend to the EIA's short-term increase in gas  
25 pricing with a gradual decline through 2022. It is  
26 noteworthy that the current gas price forecasts are only  
27 estimates, and market conditions along with colder

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<sup>3</sup> Source: <https://www.cmegroup.com/markets/energy/natural-gas/natural-gas.quotes.html>

1 weather or an active 2022 hurricane season in the Gulf  
2 of Mexico may impact current projections.

3  
4 Global events and market conditions, such as the ongoing war in  
5 Ukraine<sup>4</sup> and inflationary pressures,<sup>5</sup> have contributed to the current  
6 higher fuel and other commodity prices. In fact, DEC witness  
7 Vederame indicates that the Company expects the price of delivered  
8 coal to increase to \$91.89 per ton for the billing period, compared to  
9 \$78.22 per ton for the test period.<sup>6</sup>

10 These impacts should not be as substantial on the near-term price  
11 of nuclear fuel due to the Company's fuel procurement strategy,  
12 discussed in DEC witness Houston's direct testimony. He states that  
13 the average nuclear fuel expense is expected to increase from  
14 0.5726 cents per kilowatt-hour (kWh) in the test period to 0.5773  
15 cents per kWh in the billing period.

16 **Q. WHAT IS THE CLEMSON CHP FACILITY?**

17 A. The Clemson CHP is a 16 megawatt natural gas-fired generation  
18 station owned by DEC, located in Pickens County, South Carolina,  
19 near Clemson University. The energy in the exhaust gas produced  
20 during generation is converted to steam as a byproduct. The steam  
21 byproduct is processed and sold by DEC to Clemson University

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<sup>4</sup> <https://www.cnbc.com/2022/04/18/natural-gas-surges-to-highest-level-since-2008-as-russias-war-upends-energy-markets.html>

<sup>5</sup> <https://abcnews.go.com/US/wireStory/producer-prices-surge-112-march-higher-energy-costs-84056058>

<sup>6</sup> Direct Testimony of DEC witness John A. Vederame, page 8 line 24 – page 9 line 1.

1           pursuant to a steam sale contract (SSC) that is provided as  
2           Lawrence/Metz Exhibit 3.

3   **Q.   WHAT IS YOUR CONCERN RELATED TO THE CLEMSON CHP**  
4   **AND FUEL RATES?**

5   A.   The Clemson CHP had multiple unit outages, impacting the  
6       availability and capacity factor. The outages and availability, to date,  
7       are sub-optimal per the designed capacity factor. The operating  
8       ability of the CHP has improved but is currently not close to achieving  
9       the designed availability factors. Sub-optimal performance and/or  
10      cycling of the Clemson CHP may result in higher and less efficient  
11      heat rates, resulting in more natural gas consumption for an  
12      equivalent electricity and steam output than could occur at a higher  
13      capacity factor. This results in higher fuel costs that the Company  
14      would likely seek to pass on to ratepayers.

15      The Clemson CHP was placed in service on or around December of  
16      2019. Clemson University did not complete construction of its section  
17      of the steam system until December of 2021. The Clemson CHP was  
18      designed to achieve a 90-95% capacity factor, but because of the  
19      delay in the construction of the steam system, it was dispatched  
20      much like a peaking unit. The realized fuel costs (cents/kWh) of  
21      DEC's peaking assets, filed as part of its monthly fuel reports (see

1 Schedule 5) per Commission Rule R8-52, show the effect of  
2 economic dispatch of system resources on system fuel costs.<sup>7</sup>

3 **Q. ARE YOU RECOMMENDING AN ADJUSTMENT IN THIS CASE?**

4 A. No. The SSC structure and Clemson CHP generation plant outages  
5 occurring in 2021 did not result in a significant monetary concern in  
6 the 2021 test year, but natural gas price volatility has exacerbated  
7 our concerns regarding the potential negative outcomes discussed  
8 in previous testimonies.<sup>8</sup> Primarily, the SSC does not allow a true-up  
9 of the natural gas price and other provisions, so it is difficult for DEC  
10 to match annual steam sales revenue to natural gas prices when  
11 prices are greatly increasing. These factors may be disadvantageous  
12 to North Carolina retail ratepayers.

13 As part of its investigation in this docket, the Public Staff has  
14 discussed its concerns regarding the Clemson CHP with the  
15 Company. The Company has agreed to have further discussions  
16 with the Public Staff to attempt to resolve these concerns.

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<sup>7</sup> Multiple factors are considered for system dispatch, and it is possible that given grid constraints or other factors, units may have to be run out of uneconomic order in some cases.

<sup>8</sup> Testimony of Dustin R. Metz filed May 18, 2020, in Docket No. E-7, Sub 1228, and Supplemental Testimony of Dustin R. Metz filed March 25, 2020, in Docket No. E-7, Sub 1219 pp. 5-14, supporting Exhibits, and related settlement.

1    **Q.    FOR THE TEST YEAR, DID THE PUBLIC STAFF AUDIT**  
2           **CLEMSON CHP INVOICES?**

3    A.    Yes, the Public Staff audited the Clemson CHP test year monthly  
4           invoices and found a minor issue with the test year revenues and  
5           billing data; DEC has been notified about this finding. The Public  
6           Staff is concerned about the invoices and in particular the SSC  
7           Exhibit C Payment Calculation equation and explanation that centers  
8           on the New York Mercantile Exchange (NYMEX) Henry Hub (HH)  
9           price. A minor time series misalignment exists between DEC's test  
10          year (calendar year) and the SSC June to July NYMEX HH price.  
11          DEC used the same NYMEX HH price throughout the entire calendar  
12          year, instead of using two discretely different natural gas prices.  
13          Based on initial analysis and the time misalignment of six months,  
14          the adjustment would likely be immaterial and not change the fuel  
15          rate in this case.  
16          However, the Company and the Public Staff have agreed that this  
17          limited issue of steam sale revenue should be trued-up and reflected  
18          in next year's annual fuel rider (2023) and adjusted back to the  
19          initiation of the SSC.

20   **Q.    DOES THIS CONCLUDE YOUR TESTIMONY?**

21   A.    Yes, this concludes our testimony.

## APPENDIX A

**QUALIFICATIONS AND EXPERIENCE**

EVAN D. LAWRENCE

I graduated from East Carolina University in Greenville, North Carolina in May 2016, earning a Bachelor of Science degree in Engineering with a concentration in Electrical Engineering. I started my current position with the Public Staff in September 2016. Since that time, my duties and responsibilities have focused on reviewing renewable energy projects, rate design, renewable energy portfolio standards (REPS) compliance, and annual fuel rider proceedings. I have filed affidavits in Dominion Energy North Carolina's 2017 and 2018 REPS cost recovery proceeding, testimony in DENC's 2021 fuel cost recovery proceeding, testimony in DEP's 2019 REPS cost recovery proceeding, an affidavit in DEC's 2019 REPS cost recovery proceeding, testimony in New River Light and Power's most recent rate case proceeding, testimony in Western Carolina University's most recent rate case proceeding, and testimony in multiple dockets for requests for CPCNs.

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## Appendix B

**QUALIFICATIONS AND EXPERIENCE**

DUSTIN R. METZ

Through the Commonwealth of Virginia Board of Contractors, I hold a current Tradesman License certification of Journeyman and Master within the electrical trade, awarded in 2008 and 2009 respectively. I graduated from Central Virginia Community College, receiving Associate of Applied Science degrees in Electronics and Electrical Technology (Magna Cum Laude) in 2011 and 2012 respectively, and an Associate of Arts in Science in General Studies (Cum Laude) in 2013. I graduated from Old Dominion University in 2014, earning a Bachelor of Science degree in Engineering Technology with a major in Electrical Engineering and a minor in Engineering Management. I completed engineering graduate course work in 2019 and 2020 from North Carolina State University.

I have over twelve years of combined experience in engineering, electromechanical system design, troubleshooting, repair, installation, commissioning of electrical and electronic control systems in industrial and commercial nuclear facilities, project planning and management, and general construction experience. My general construction experience includes six years of employment with Framatome, where I provided onsite technical support, craft oversight, and engineer design change packages, as well as participated in root cause analysis teams at commercial nuclear

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power plants, including plants owned by both Duke and Dominion. I also worked for six years for an industrial and commercial construction company, where I provided field fabrication and installation of electrical components that ranged from low voltage controls to medium voltage equipment, project planning and coordination with multiple work groups, craft oversight, and safety inspections.

I joined the Public Staff in the fall of 2015. Since that time, I have worked on general rate cases, fuel cases, applications for certificates of public convenience and necessity, service and power quality, customer complaints, North American Electric Reliability Corporation (NERC) Reliability Standards, nuclear decommissioning, National Electric Safety Code (NESC) Subcommittee 3 (Electric Supply Stations), avoided costs and PURPA, interconnection procedures, integrated resource planning, and power plant performance evaluations. I have also participated in multiple technical working groups and been involved in other aspects of utility regulation.

**LAWRENCE/METZ EXHIBIT 1**

**Proposed Fuel and Fuel-Related Cost Factors in cents per kWh**  
**effective September 1, 2022**  
**(excludes regulatory fee)**

**TABLE 1 – Company PROPOSED Fuel and Fuel-Related Cost Factors**  
**(¢ per kWh)**

<b>Rate Class</b>	<b>Base &amp; Prospective</b>	<b>EMF</b>	<b>EMF Interest</b>	<b>Total Fuel Factor</b>
Residential	2.0003	0.4863	0	2.4866
General Service/Lighting	1.8217	0.6254	0	2.4471
Industrial	1.8396	0.5726	0	2.4122

For comparison, Table 2 below provides the existing fuel and fuel-related cost factors (excluding the regulatory fee) approved in Docket No. E-7, Sub 1250:

**TABLE 2 – EXISTING Fuel and Fuel-Related Cost Factors (¢ per kWh)**

<b>Rate Class</b>	<b>Base &amp; Prospective</b>	<b>EMF</b>	<b>EMF Interest</b>	<b>Total Fuel Factor</b>
Residential	1.5337	(0.0282)	(0.0041)	1.5014
General Service/Lighting	1.6895	0.0476	0	1.7371
Industrial	1.7243	0.1391	0	1.8634

**LAWRENCE/METZ EXHIBIT 2**

**Table 3 - DEC Natural Gas Expenditures and MMBTU burn by year since  
2016, with projected billing period amount**

Year	Natural Gas Expenditures	MMBTU Burned
2016	\$ 297,215,997.00	89,033,291
2017	\$ 295,089,639.00	80,836,215
2018	\$ 491,486,800.00	128,577,377
2019	\$ 420,485,660.00	123,770,761
2020	\$ 396,180,386.00	135,239,429
2021	\$ 798,022,718.00	189,437,272
Billing Period	\$ 932,067,312.00	242,000,000

**LAWRENCE/METZ EXHIBIT 3**  
**CLEMSON STEAM SALE CONTRACT**  
**("STEAM SUPPLY AND PURCHASE AGREEMENT")**

**OFFICIAL COPY**

**May 17 2022**

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**STEAM SUPPLY AND PURCHASE AGREEMENT**

Between

DUKE ENERGY CAROLINAS, LLC

as Seller

and

CLEMSON UNIVERSITY

as Buyer

Dated as of February 2, 2017

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## STEAM SUPPLY AND PURCHASE AGREEMENT

This STEAM SUPPLY AND PURCHASE AGREEMENT (this "Agreement") is made and entered into effective as of February \_\_, 2017 (the "Effective Date") between Duke Energy Carolinas, LLC, a North Carolina limited liability company ("Seller"), and Clemson University, a body politic under the laws of the State of South Carolina ("Buyer"). Buyer and Seller are sometimes referred to herein individually as a "Party" and collectively as the "Parties."

### RECITALS

WHEREAS, Buyer uses steam for purposes of heating classroom, library, office, administrative, and other buildings on its university campus;

WHEREAS, Buyer desires to engage Seller to convert water into steam that Buyer can purchase from Seller for process use in Buyer's facilities and is willing to lease to Seller a site on Buyer's property at which Seller can produce and provide such steam; and

WHEREAS, Seller is willing to be so engaged and accordingly is willing to construct and own at such site a combined heat and power facility consisting of a natural gas fired turbine and associated electric generator, along with an associated heat recovery steam generator and supplementary direct fired natural gas burner, which will be capable of providing approximately 125 k-lb./hour of steam in accordance with the terms and conditions set forth in this Agreement;

### AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and promises set forth herein and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and intending to be bound hereby, the Parties hereby agree as follows:

#### **ARTICLE 1 DEFINITIONS AND USAGE**

1.1 Definitions. As used in this Agreement, the following capitalized terms have the meanings set forth below.

"Affected Party" has the meaning set forth in Section 12.5(a).

"Affiliate" means, with respect to any specified Person (other than a natural person), any other Person who, directly or indirectly, through one or more intermediaries, owns or controls, is under common ownership or control with, or is owned or controlled by, such Person. For purposes of the foregoing, "control", "controlled by", and "under common control with" with respect to any Person will mean the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract, or otherwise. "Affiliate" will include, in the case of Buyer, any foundation created for the benefit of Buyer.

"Agreement" has the meaning set forth in the first paragraph of this Agreement.



"Bankrupt" means, with respect to a Party or other entity, that such Party or other entity: (i) is dissolved (other than pursuant to a consolidation, amalgamation or merger); (ii) becomes insolvent or is unable to pay its debts or fails (or admits in writing its inability) generally to pay its debts as they become due; (iii) makes a general assignment, arrangement or composition with or for the benefit of its creditors; (iv) has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditor's rights, or a petition is presented for its winding-up or liquidation, which proceeding or proceeding is not dismissed, stayed or vacated within 30 days thereafter; (v) commences a voluntary proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights; (vi) seeks or consents to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for it or for all or substantially all of its assets; (vii) has a secured party take possession of all or substantially all of its assets, or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all of its assets; (viii) causes or is subject to any event with respect to it which, under the applicable Laws of any jurisdiction, has an analogous effect to any of the events specified in clauses (i) to (vii) inclusive; or (ix) takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the foregoing acts.

"Business Day" means any day except a Saturday, Sunday or a Federal Reserve Bank holiday. A Business Day will open at 8:00 a.m. and close at 5:00 p.m., at the location of the Facility.

"Buyer" has the meaning set forth in the first paragraph of this Agreement.

"Buyer Conditions Precedent" has the meaning set forth in Section 2.3.

"Change in Law" means any binding, written change after the Effective Date in the judicial or administrative interpretation of, or adoption after the Effective Date of, any Environmental Law or Law relating to Taxes, which is inconsistent or at variance with any Law in effect on the Effective Date; *provided, however*, that a Change in Law will not include any change or adoption of any Law with respect to (a) Taxes assessed on income, profits, revenues or gross receipts, (b) Taxes that vary the compensation, benefits, or amounts to be paid to or on behalf or on account of employees, or (c) organization, existence, good standing, qualification, or licensing in any jurisdiction.

"Change in Law Costs" means the actual and verifiable change (whether on a one-time or cumulative basis) in the Affected Party's operating costs for or in connection with the purchase or sale of Steam under this Agreement (and not in any event including any change in operating costs for or in connection with the purchase or sale of electric energy or any other product or service from the Facility outside of this Agreement) that results from a Change in Law, excluding costs of any applicable greenhouse gas emissions credits or offsets (which are subject to the provisions of Section 12.5(c)); *provided, however*, that "Change in Law Costs" will not include any costs or expenses caused by or resulting from any failure by the Affected Party to comply, or delay by the Affected Party in complying, with any Governmental Rule. "Change in Law Costs" include any additional amounts of federal, state or local Taxes that the Affected

Party is required to pay as a result of reimbursement by the other Party of any Change in Law Costs under or pursuant to this Agreement.

“Change in Law Threshold Amount” means the amount of \$15 million.

“CHP” means combined heat and power.

“Claim” means any demand, claim, action, suit, investigation, arbitration or proceeding (whether at law or in equity) before or by any Governmental Authority or by any other Person.

“Claiming Party” has the meaning set forth in Section 12.1.

“Commercial Operation Date” means the date identified in written notice from Seller to Buyer as the date upon which the Facility, including the natural gas supply thereto, is complete, and deliveries of Steam (other than test deliveries) will commence under this Agreement.

“Condensate” means the Steam condensate supplied by Buyer to the Facility for use by Seller in the production of Steam, in accordance with the specifications set forth on Exhibit A.

“Condensate Delivery Point” means the physical point at which interconnection for delivery of Condensate is made between the Condensate systems of the Host and the Facility, as set forth on Exhibit B.

“Condensate Interconnection Facilities” means those physical facilities of a quality and type reasonably required for the receipt and delivery of Condensate, including service stop valves, meter stop valves, meter supports, meter(s), pipe system(s), pipeline(s), and other facilities of a quality and type reasonably required to effectuate the purposes of this Agreement.

“Confidential Information” has the meaning set forth in Section 17.1.

“Contract Price” means the price to be paid by Buyer to Seller for Steam, as set forth in Exhibit C.

“Contract Year” means each calendar year during the Term, commencing on the Commercial Operation Date, provided that if the first and last Contract Years are not full calendar years, the first Contract Year will mean the period from the Commercial Operation Date to December 31 of such calendar year, and the last Contract Year will mean the period from January 1 of the last Contract Year through the last day of the Term.

“Credit Rating” means (i) with respect to any entity other than a financial institution, the current (A) rating issued or maintained by S&P or Moody’s with respect to such entity’s long-term senior, unsecured, unsubordinated debt obligations (not supported by third party credit enhancements) or (B) corporate credit rating or long-term issuer rating issued or maintained with respect to such entity by S&P or Moody’s, or (ii) if such entity is a financial institution, the ratings issued or maintained by S&P or Moody’s with respect to such entity’s long-term, unsecured, unsubordinated deposits.

“Defaulting Party” has the meaning set forth in Section 14.1.



"Delivery Point" means any of the Steam Delivery Point and the Condensate Return Delivery Point.

"Delivery Term" means the period of time commencing on the Commercial Operation Date and ending on the expiration or earlier termination of the Term.

"Disclosing Party" has the meaning set forth in Section 17.1(a).

"Dispute" has the meaning set forth in Section 18.4(a).

"Early Termination Date" has the meaning set forth in Section 14.3(a).

"Easement Areas" has the meaning set forth in the Ground Lease.

"Easements" has the meaning set forth in the Ground Lease.

"Effective Date" has the meaning set forth in the first paragraph of this Agreement.

"Environmental Credits" means greenhouse gas offsets, "carbon credits," emission credits, emission reduction credits, renewable energy credits, renewable energy certificates, environmental attributes, environmental credits, "green" credits, "green" certificates, emissions allowances, tax credits, or other similar credits or certificates.

"Environmental Laws" means all Laws relating to (i) facility siting, land use and environmental matters, (ii) the control of any pollutant, or protection of the air, water, or land, (iii) solid, gaseous or liquid waste generation, handling, treatment, storage, disposal or transportation, (iv) exposure to hazardous, toxic or other harmful substances, and (v) the protection and enhancement of the environment. Environmental Laws will include the Clean Air Act, 42 U.S.C. § 7401 et seq. ("CAA"), the Clean Water Act, 33 U.S.C. § 1251 et seq. ("CWA"), the National Environmental Policy Act, 42 U.S.C. § 4321 et seq., the Endangered Species Act, 16 U.S.C. § 1531 et seq., the Resource Conservation Recovery Act, 42 U.S.C. § 6901 et seq. ("RCRA"), the Safe Drinking Water Act, 42 U.S.C. § 300f et seq., the Comprehensive Environmental Response, Compensation, and Liability Act as amended by the Superfund Amendments and Reauthorization Act, 32 U.S.C. § 9601 et seq. ("CERCLA"), the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. § 136 et seq., the Hazardous Materials Transportation Act, 49 U.S.C. § 1801 et seq., the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq. ("TSCA"), and the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11001 et seq., any state or local Laws relating to Permits, local land use control ordinances or similar Laws, and any state or local Laws implementing or substantially equivalent to the foregoing federal requirements.

"Environmental Noncompliance" means any violation of Environmental Laws, including: (a) the discharge, emission, release or threatened release (as such term is used in CERCLA, RCRA, the CWA, the CAA or other similar Environmental Laws) of any Hazardous Materials in violation of any Environmental Laws; (b) any noncompliance with Environmental Laws regarding the construction, modification, operation and maintenance of physical structures, equipment, processes or facilities; (c) any noncompliance with federal, state or local requirements governing occupational safety and health related to Hazardous Materials; (d) any

facility operations, procedures, designs, or other matters which do not conform to the statutory or regulatory requirements of Environmental Laws, including the CAA, the CWA, the TSCA and the RCRA; (e) the failure to have obtained or to maintain in full force and effect Permits, variances or other authorizations necessary for the legal operation of any equipment, process, facility or any other activity, to the extent required for compliance with Environmental Laws; or (f) the operation of any facility, process, or equipment in violation of any Permit condition, schedule of compliance, administrative or court order, to the extent required for compliance with Environmental Laws.

“Event of Default” has the meaning set forth in Section 14.1.

“Existing Environmental Conditions” means any environmental conditions, circumstances or other matters of fact pertaining to, relating to or otherwise affecting the environment and in existence prior to the Effective Date, including any environmental pollution, contamination, degradation, damage or injury caused by, related to, or arising from or in connection with (i) the presence, use, handling, storage, treatment, recycling, generation, transportation, release, spilling, leaking, pumping, pouring, emptying, discharging, injecting, escaping, leaching, disposal (including the abandonment or discarding of barrels, containers and other closed receptacles containing any Hazardous Materials), dumping or threatened release of Hazardous Materials in connection with the ownership, possession, construction, improvement, use or operation of the Site prior to the Effective Date, (ii) the offsite transport prior to the Effective Date of Hazardous Materials from the Site, or the treatment, storage or disposal of Hazardous Materials transported from the Site to another site prior to the Effective Date and (iii) the release prior to the Effective Date of Hazardous Materials from the Site into the atmosphere or any water course or body of water not included in the Site.

“Facility” means (i) the CHP facility to be constructed by Tenant on the Site as such facility is generally described on Exhibit B attached hereto, including the HRSG, and (ii) all other equipment related to the foregoing owned by Seller and located on the Site or the Easement Areas, and (iii) any modifications or additions to any of the foregoing.

“Force Majeure Event” means any event, condition or circumstance that: (i) is not a consequence or result of the fault or negligence of the affected Party or its Affiliates, (ii) cannot, despite the exercise of commercially reasonable efforts by the affected Party, be controlled, prevented, avoided or removed, and (iii) prevents in whole or in part performance of the obligations of the affected Party under this Agreement. The following events, the list of which is not exhaustive, will be considered to be Force Majeure Events to the extent they satisfy the requirements of the foregoing sentence: (a) lightning, earthquake, hurricane, storm, wind, drought, abnormal weather condition, or other similar natural calamities or acts of God; (b) fire, explosion or chemical contamination; (c) epidemic, quarantine restriction or plague; (d) act of war (declared or undeclared), invasion, armed conflict or act of foreign enemy, blockage, economic sanction or embargo, revolution, sabotage, riot, insurrection, civil unrest or disturbance, military or guerilla action, banditry, terrorist activity or a threat of terrorist activity, or tribal, religious or sectarian unrest; (e) radioactive contamination (and associated clean-up activities); (f) damage to or failure of the Facility or the Host caused by a Person other than the affected Party; and (g) other acts or occurrences beyond the control of the affected Party, including the act or omission of Governmental Authorities (to the extent such act or omission is



not a result of the failure of the affected Party to act on any lawful request of such Governmental Authority). "Force Majeure Event" expressly excludes: (w) governmental action (including any binding order of any Governmental Authority) that such Party could have prevented by compliance with applicable Law; (x) a Party's financial inability to perform, (y) changes in market prices for products or services produced by a Party, (z) any failure to perform, and the effects of such failure, that could have been prevented, overcome or remedied by the exercise of reasonable efforts by the Party claiming excused performance by reason of a Force Majeure Event, or (aa) global economic or financial market conditions.

"GAAP" means United States generally accepted accounting principles consistently applied.

"Governmental Authority" means any national, state, provincial, local, tribal or municipal government, any political subdivision thereof or any other governmental, regulatory, quasi-governmental, judicial, public or statutory instrumentality, authority, body, agency, department, bureau, or entity with authority to bind a Party at law; *provided, however*, that "Governmental Authority" will not in any event include any Party.

"Ground Lease" means the Ground Lease and Easement Agreement between Seller, as Tenant, and Buyer, as Landlord, of even date herewith, pursuant to which Seller leases the Site.

"Hazardous Materials" means any chemicals, materials, substances, or items in any form, whether solid, liquid, gaseous, semisolid, or any combination thereof, whether waste materials, raw materials, chemicals, finished products, by-products, or any other materials or articles, which are listed or regulated as hazardous, toxic or dangerous or as waste or a contaminant, or are otherwise listed or regulated, or for which liability or standards of care are imposed, under any Environmental Law, including petroleum products, asbestos, PCBs, coal combustion by-products, urea formaldehyde foam insulation, lead-containing paints or coatings, and any substances included in the definition of "hazardous debris," "hazardous substances," "hazardous materials," "hazardous wastes," "toxic substances," "pollutants," "contaminants" or words of similar import, under any Environmental Laws.

"Host" means the facility located in Pickens County, South Carolina, and all appurtenant structures, fixtures, improvements, equipment and other appurtenant personal property interests now or hereafter owned or leased by Buyer or any Affiliate of Buyer on the Host Premises, including the water supply and steam delivery systems between the Host and the applicable Delivery Points and any and all other improvements installed on the Host Premises from time to time.

"Host Premises" means all premises other than the Site that are owned or leased by Buyer or its Affiliates and at which the Steam will be used or through which the Steam will be delivered.

"HRSG" means the heat recovery steam generator located within the Facility.

"IFRS" means the International Financial Reporting Standards as in effect from time to time.



“Indemnified Party” has the meaning set forth in Section 16.1.

“Indemnifying Party” has the meaning set forth in Section 16.1.

“Interconnection Facilities” means each of the Condensate Interconnection Facilities and Steam Interconnection Facilities.

“Interest Rate” means, for any date, the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in *The Wall Street Journal* under “Money Rates” on such day (or if not published on such day, on the most recent preceding day on which published), plus 2%; and, (b) the maximum rate permitted by applicable Law.

“Landlord” means Buyer as Landlord under the Ground Lease.

“Laws” means all common law, laws, statutes, treaties, rules, orders, codes, ordinances, standards, regulations, restrictions, official guidelines, policies, directives, interpretations, Permits or like action having the effect of law of any Governmental Authority.

“Losses” has the meaning set forth in Section 16.1.

“Make-Up Water” means raw water procured by Seller, in the quantity set forth in Section 6.2, for the production of Steam under this Agreement.

“Merger Event” means, with respect to a Party or other entity, that such Party or other entity consolidates or amalgamates with, or merges into or with, or transfers all or substantially all of its assets to, another entity, and (i) the resulting, surviving or transferee entity fails, at the time of such consolidation, amalgamation, merger or transfer, to assume each and all of the obligations of such Party or other entity under this Agreement, either by operation of Law or pursuant to an agreement reasonably satisfactory to the other Party, (ii) the Credit Rating (from each of S&P and Moody’s, as applicable) of such of the resulting, surviving or transferee entity is not equal to or higher than the Credit Rating of such Party or other entity, or (iii) the resulting, surviving or transferee entity is not rated by at least one of S&P and Moody’s.

“Metering Tolerances” means a band between +1% and -1%.

“Monthly Invoice” has the meaning set forth in Section 4.2.

“Monthly Payment” has the meaning set forth on Exhibit C.

“Moody’s” means Moody’s Investor Services, Inc. and any successor thereto.

“Non-Defaulting Party” means, with respect to any Event of Default, the Party that is not the Defaulting Party.

“Order” means any order, ruling, decision, judgment, writ, injunction, decree, settlement, stipulation or award of any Governmental Authority.

"Party" or "Parties" has the meaning set forth in the first paragraph of this Agreement and includes any permitted assignee of a Party.

"Permit" means the written permission or authorization granted by a Governmental Authority, including all licenses, permits, decrees, franchises, consents, authorizations, approvals, ratifications, certifications, registrations, exemptions, variances, exceptions, waivers, extensions and similar consents granted or issued by any Governmental Authority.

"Permitted Transaction" means any of the following: (a) transactions among Affiliates of Seller or Buyer (or, in the case of Buyer, transactions among foundations created for or to benefit the Buyer), including any corporate reorganization, merger, combination or similar transaction or transfer of assets or ownership interests involving Seller, Buyer or their Affiliates; (b) the direct or indirect transfer of shares of, or equity interests in, Seller to a tax equity investor; or (c) a transfer of the Facility packaged with all or substantially all of the assets of Seller's Ultimate Parent Entity; *provided* that the entity that operates the Facility following such transfer is (or contracts with) a Qualified Operator.

"Person" means and includes an individual, a partnership, a joint venture, a corporation, a union, a limited liability company, a trust, an unincorporated organization, Governmental Authority or any other separate legal entity recognized pursuant to law.

"Planned Outage" means a scheduled outage that may require removal of the Facility or the Host, in whole or in part, from service in order to perform specified work on specific components of the Facility. A Planned Outage has a pre-determined start date, an estimated duration, which may last for several weeks, and occurs as scheduled in a notice given by the Seller (with respect to the Facility) or Buyer (with respect to the Host) to the other Party in accordance with Section 8.2.

"Prudent Operating Practices" means, with respect to the Facility, the practices, methods and acts generally engaged in or approved by the CHP industry segment supplying thermal energy and electric energy to institutional, commercial, or industrial customers and selling electric energy to public utilities in the southeastern United States for similar facilities during a particular time period, or any of such practices, methods, and acts, that, in the exercise of reasonable judgment in light of the facts known or that reasonably should be known at the time a decision is made, would be expected to accomplish the desired result in a manner consistent with applicable Law, reliability, safety, environmental protection, economy and expedition, and which practices, methods and acts are consistent with any applicable operation and maintenance standards recommended by the Facility's equipment suppliers and manufacturers, operational limits. Without limiting the foregoing, Prudent Operating Practices are not intended to be limited to the optimum practices, methods or acts, to the exclusion of all others, but rather to include a spectrum of practices, methods or acts generally acceptable in the region during the relevant period in light of the circumstances.

"Qualified Operator" means an operator of generation facilities of a similar type and size as the Facility that is nationally recognized and that demonstrates to Buyer's reasonable satisfaction that it and the personnel who will be operating the Facility have sufficient experience to successfully and effectively operate the Facility in accordance with the terms and conditions



of this Agreement, including a minimum of 3 years' experience in the operation of one or more CHP or other gas-fired generating facilities, and demonstrates to Buyer's reasonable satisfaction that the operator has the financial capability to fulfill Seller's obligations hereunder.

"Receiving Party" has the meaning set forth in Section 17.1(a).

"Representatives" means, means, with respect to a Party, (i) the directors, officers, managers, employees, financial advisors, accountants, auditors, legal counsel, consultants and other representatives of such Party or its Affiliates and (ii) such Party's or its Affiliates' current or potential lenders, sources of funding or rating agencies.

"Required Credit Rating" means, in the case of any Person, that such Person's long-term senior, unsecured, unsubordinated debt obligations (not supported by third party credit enhancements) are rated by at least one of S&P and Moody's, and that such Person has a Credit Rating of (i) if rated by only one of Moody's or S&P, a Credit Rating of "Baa2" or higher by Moody's or "BBB-" or higher by S&P, or (ii) if rated by both Moody's and S&P, a Credit Rating of "Baa2" or higher by Moody's and "BBB-" or higher by S&P.

"S&P" means the Standard & Poor's Rating Group (a division of McGraw-Hill, Inc.) or its successor.

"SCPSC" means the South Carolina Public Service Commission or its successor.

"Seller" has the meaning set forth in the first paragraph of this Agreement.

"Seller Conditions Precedent" has the meaning set forth in Section 2.4.

"Site" has the meaning set forth in the Ground Lease.

"State Regulatory Approval" means a final, non-appealable written order from the SCPSC or any other state public utilities commission having jurisdiction that, as applicable, (i) grants a certificate of public convenience and necessity or equivalent regulatory approval for the Facility, (ii) determines that the costs incurred by Seller for the generation and delivery of electric power from the Facility are recoverable from Seller's retail electric customers pursuant to applicable Law, or (iii) approves Seller as a steam corporation for purposes of the sale of Steam under this Agreement.

"Steam" means the steam produced by the Facility and delivered to the Steam Delivery Point in accordance with the specifications on Exhibit A.

"Steam Delivery Point" means the physical point at which interconnection for delivery of Steam is made between the Steam systems of the Host and the Facility, as set forth on Exhibit B.

"Steam Flow Meter" has the meaning set forth in Section 5.1(a).

"Steam Interconnection Facilities" means those physical facilities of a quality and type reasonably required for the receipt and delivery of Steam, including service stop valves, meter

stop valves, meter supports, meter(s), pipe system(s), pipeline(s), and other facilities of a quality and type reasonably required to effectuate the purposes of this Agreement.

“Subcontractor” has the meaning set forth in Section 13.3(a).

“Substation Easement Agreement” means an easement agreement under which Buyer would grant to Seller an easement for the development, construction, ownership, operation, and maintenance of a utility substation through which electric service would be provided to Buyer’s university campus and the Facility would interconnect with the electric transmission system.

“Target Commercial Operation Date” means April 30, 2019 or any date to which the Target Commercial Operation Date may be extended in accordance with the provisions of this Agreement.

“Taxes” means all present and future license, documentation, recording and registration fees, all taxes (including income, gross receipts, unincorporated business income, payroll, sales, use, privilege, personal property (tangible and intangible), real estate, excise and stamp taxes), levies, imports, duties, assessments, fees (customs or otherwise), charges and withholdings of any nature whatsoever, and all penalties, fines, additions to tax, and interest imposed by any Governmental Authority.

“Tenant” means Seller as Tenant under the Ground Lease.

“Term” has the meaning set forth in Section 2.1.

“Termination Payment” means the applicable amount set forth in Exhibit D.

“Ultimate Parent Entity” means, with respect to Seller, Duke Energy Corporation.

“Utilities” has the meaning set forth in the Ground Lease.

## 1.2 Interpretation.

(a) Words singular and plural will be deemed to include the other, and pronouns having masculine or feminine gender will be deemed to include the other.

(b) Unless expressly stated otherwise, (i) reference to any Person includes such Person’s successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, (ii) reference to a Person in a particular capacity excludes such Person in any other capacity or individuality, and (iii) reference to a Governmental Authority includes any Person succeeding to its functions and capacities.

(c) Any reference in this Agreement to any Section, Exhibit means and refers to the Section contained in, or Exhibit attached to, this Agreement.

(d) Other grammatical forms of defined words or phrases have corresponding meanings.



(e) A reference to writing includes typewriting, printing, lithography, photography, electronic mail, and any other mode of representing or reproducing words, figures or symbols in a lasting or visible form.

(f) Unless otherwise provided, a reference to a specific time for the performance of an obligation is a reference to that time in the place where that obligation is to be performed.

(g) A reference to a document, code, contract or agreement, including this Agreement, includes a reference to that document, code, contract or agreement as novated, amended, modified, revised, supplemented, replaced or restated from time to time in accordance with the relevant provisions thereof. Any term defined or provision incorporated in this Agreement by reference to another document, instrument or agreement will continue to have the meaning or effect ascribed thereto whether or not such other document, instrument or agreement is in effect.

(h) Unless otherwise expressly provided for as set forth herein, the term "day" will mean a calendar day, and whenever an event is to be performed or payment, act, matter or thing hereunder would occur on a day that is not a Business Day, then such event will be performed and such payment, act, matter or thing will, unless otherwise expressly provided for herein, occur on the next succeeding Business Day.

(i) Relative to the determination of any period of time, "from" means "from and including," "to" means "to but excluding," and "through" means "through and including."

(j) Where reference is made to an applicable Law, such reference, to give meaning to the intent of the Parties hereto, will be deemed to include all prior and subsequent enactments, amendments and modifications pertaining thereto.

(k) Any reference to the words "include and including" will be interpreted to mean "including without limitation," and any reference to the words "hereof," "hereunder," or "herein" or words of similar import will refer to this Agreement as a whole and to a particular Article, Section, subsection, clause or other subdivision hereof.

(l) References to "or" will be deemed to be disjunctive but not necessarily exclusive (*i.e.*, unless the context dictates otherwise, "or" will be interpreted to mean "and/or" rather than "either/or").

(m) All monetary references contained herein refer to U.S. dollars.

(n) All accounting terms used herein will be construed in accordance with GAAP (or IFRS if required under applicable Law) unless the context or use requires a different interpretation. Any financial statements provided pursuant to this Agreement will be prepared in accordance with GAAP (or IFRS if required under applicable Law).

(o) Any words or phrases (including electrical, natural gas and CHP industry terms) not otherwise defined herein will have their common meanings.

## ARTICLE 2

### TERM OF AGREEMENT; TERMINATION

2.1 Term. The term of this Agreement (the "Term") will commence on the Effective Date and will remain in effect for a period of 35 years from the Commercial Operation Date, unless earlier terminated in accordance with the provisions of this Agreement.

2.2 Termination Prior to Target Commercial Operation Date.

(a) Seller may terminate this Agreement, without any liability for or as a result of such termination except as provided in Section 2.2(d), by written notice to Buyer on or before the Target Commercial Operation Date if:

(i) Any of the Seller Conditions Precedent set forth in Section 2.4 are not satisfied or waived by Seller;

(ii) Seller (A) receives (1) a written order rejecting any State Regulatory Approval or imposing conditions on any State Regulatory Approval that Seller, in its sole and absolute discretion, determines are unsatisfactory, or (2) any determination rejecting or attaching material adverse conditions on any Permit required under applicable Law for Seller's performance of its obligations hereunder, or (B) reasonably determines that it will be unable to secure, through reasonable diligence and effort, any applicable State Regulatory Approval or any Permits required under applicable Law to construct, own and operate the Facility or any Interconnection Facilities, lease the Site and provide the Steam to be provided by Seller to Buyer hereunder, including the Permits listed on Exhibit E; or

(iii) Seller receives a final, unappealable Order from a Governmental Authority that prohibits or materially adversely affects the transactions contemplated in this Agreement or the Ground Lease.

(b) Subject to Seller's rights to extend the Target Commercial Operation Date under Section 2.2(c), Buyer may terminate this Agreement, without any liability for or as a result of such termination except as provided in Section 2.2(e), by written notice to Seller on or before the Target Commercial Operation Date if any of the Buyer Conditions Precedent set forth in Section 2.3 are not satisfied or waived by Buyer on or before the Target Commercial Operation Date.

(c) Seller will have a right to extend the original Target Commercial Operation Date as follows:

(i) If Seller makes a good faith determination that it will be unable to secure, through reasonable diligence and effort, any applicable State Regulatory Approval or any Permits required under applicable Law to construct, own and operate the Facility or any Interconnection Facilities, lease the Site and provide the Steam to be provided by Seller to Buyer hereunder, including the Permits listed on Exhibit E, Seller may extend the original Target Commercial Operation



Date for a period of up to 12 months by written notice to Buyer prior to the original Target Commercial Operation Date; *provided* that Seller exercises diligent and commercially reasonable efforts to secure any such State Regulatory Approval or Permit;

(ii) If a Force Majeure Event occurs prior to the original Target Commercial Operation Date, Seller may extend the original Target Commercial Operation Date for a period equal to the duration of such Force Majeure Event plus an additional 30 days; *provided, however*, that in no event may such extension exceed a period of 12 months.

(d) If this Agreement is terminated solely as a result of any failure of the Seller Condition Precedent provided in Section 2.4(a) or as a result of any failure of any of the Buyer Conditions Precedent provided in Sections 2.3(e) or 2.3(f), Seller will reimburse Buyer for all of the actual and reasonable costs and actual and reasonable expenses incurred by Buyer for or in connection with the Interconnection Facilities prior to such termination.

(e) If this Agreement is terminated solely as a result of any failure of the Buyer Condition Precedent provided in Section 2.3(a) or as a result of any failure of any of the Seller Conditions Precedent provided in Sections 2.4(b) or 2.4(c), Buyer will reimburse Seller for all of the actual and reasonable costs and actual and reasonable expenses incurred by Seller for or in connection with the Interconnection Facilities prior to such termination.

2.3 Buyer Conditions Precedent. The following will be the "Buyer Conditions Precedent":

(a) Approval of this Agreement by the Board of Trustees of Buyer;

(b) The occurrence of the Commercial Operation Date, and the completion by Seller of, and operability of, any and all Interconnection Facilities necessary for the delivery of Steam to Buyer at the applicable Delivery Points and necessary for the receipt of Condensate from Buyer at the applicable Delivery Points;

(c) Receipt by Seller of all applicable State Regulatory Approvals and all Permits required under applicable Law to construct, own and operate the Facility or any Interconnection Facilities, lease the Site and provide the Steam to be provided by Seller to Buyer hereunder, including the Permits listed on Exhibit E;

(d) Receipt by Buyer of all Permits required for the performance by it of its obligations under this Agreement and the Ground Lease;

(e) Execution and delivery of the Ground Lease by Seller; and

(f) The absence of any Event of Default or facts and circumstances that, with the passage of time or giving of notice, would give rise to an Event of Default with respect to Seller hereunder.

2.4 Seller Conditions Precedent. The following will be the “Seller Conditions Precedent”:

- (a) Approval of this Agreement by the Board of Directors of Seller;
- (b) Execution and delivery of the Ground Lease by Buyer; and
- (c) The absence of any Event of Default or facts and circumstances that, with the passage of time or giving of notice, would give rise to an Event of Default with respect to Buyer hereunder.

2.5 Right to Terminate for Failure to Execute Substation Easement Agreement. Either Party may terminate this Agreement, without any liability for or as a result of such termination, by written notice to the other Party on or before September 15, 2017 if the form of the Substation Easement Agreement has not been agreed to and the Substation Easement Agreement has not been executed and delivered and recorded on or before August 31, 2017.

### ARTICLE 3 PURCHASE AND SALE OF STEAM

#### 3.1 Seller's Obligations to Produce and Deliver Steam.

(a) During the Delivery Term, Seller will use Condensate and Make-Up Water to produce Steam at the Facility, in an amount each hour equal to the maximum mass volume of Steam that the Facility is reasonably capable of producing during such hour from such Condensate and Make-Up Water, and will deliver and sell such Steam to Buyer at the Steam Delivery Point.

(b) All Steam delivered by Seller to Buyer under this Agreement will be required to meet the Steam specifications set forth in Exhibit A.

(c) Seller will at all times during the Delivery Term, at its sole cost and expense, operate and maintain the Facility in accordance with Prudent Operating Practices and in compliance with applicable Law.

#### 3.2 Buyer's Obligations to Take and Pay for Steam.

(a) During the Delivery Term, Buyer will receive and purchase all Steam produced by the Facility and delivered to the Steam Delivery Point.

(b) Buyer will have no obligation to take or pay Seller for any Steam that fails to meet the Steam specifications set forth in Exhibit A. If Buyer rejects nonconforming Steam, the responsibility to dispose of such nonconforming Steam will remain with Seller. Notwithstanding the foregoing, if Buyer accepts nonconforming Steam (whether or not it has knowledge of the characteristics that make the same nonconforming), then it will be responsible for paying for such Steam on the same basis as if such Steam had conformed to the applicable specifications set forth in Exhibit A.



(c) Buyer will not use, or permit any other Person to use, Steam delivered to Buyer from the Facility for purposes of generating electric energy for use by any Person other than for use at the Host by Buyer, Clemson University Foundation, Inc., Clemson University Real Estate Foundation, Inc., Clemson University Research Foundation, Inc., Clemson University Land Stewardship Foundation, Inc., IPTAY, and their wholly owned subsidiaries.

(d) Buyer will not have any liability to Seller under this Agreement solely as a result of any failure of Buyer to take any Steam that Buyer is otherwise obligated to take hereunder, *provided* that Buyer pays for all such Steam in accordance with the requirements of this Agreement.

(e) Nothing in this Agreement shall be construed as to require Buyer to use Steam in connection with newly constructed buildings or in renovated buildings which are designed and configured by Buyer to use alternatives to Steam.

### 3.3 Transfer of Title and Risk of Loss.

(a) Title and risk of loss to Steam sold by Seller to Buyer hereunder will pass to Buyer at the Steam Delivery Point.

(b) Title and risk of loss to Condensate provided by Buyer to Seller hereunder will pass to Seller at the Condensate Delivery Point.

## ARTICLE 4 PAYMENTS

4.1 Monthly Payment. For each calendar month during the Delivery Term in which Steam is delivered to the Steam Delivery Point, Buyer will pay Seller the Contract Price as determined in accordance with Exhibit C.

### 4.2 Monthly Invoices.

(a) On or before the tenth Business Day of each calendar month during the Delivery Term following the calendar month in which the Commercial Operation Date occurs, Seller will prepare an invoice showing the Monthly Payment payable by Buyer to Seller pursuant to this Agreement ("Monthly Invoice"). If the first Contract Year does not begin on the first day of the month, then the first Monthly Invoice will include a prorated calculation for the period from the Commercial Operation Date to the end of the month in which the Commercial Operation Date occurs.

(b) Monthly Invoices will present such information and calculations in reasonable detail for the preceding month as are reasonably required to support the calculation of the Monthly Payment, including supporting data for the calculations set forth on Exhibit C.

(c) Any amount payable under this Section 4.2 by one Party to the other Party will be due and payable within 30 days after receipt of the Monthly Invoice.

#### 4.3 Taxes.

(a) Seller is liable for and will pay, or cause to be paid, or reimburse Buyer if Buyer has paid, all Taxes (including sales Tax) that are imposed or arise on Seller's side of the Delivery Points on the sale of Steam and receipt of Condensate under this Agreement.

(b) Buyer is liable for and will pay, or cause to be paid, or reimburse Seller if Seller has paid, all Taxes that are imposed or arise on Buyer's side of or at the Delivery Points on the purchase of Steam or provision of Condensate under this Agreement or use of any of the foregoing.

4.4 Environmental Credits. Seller will have the right to claim, bank, trade, sell, retire or retain any and all Environmental Credits related to the production of electric power or combined heat and power at the Facility; *provided, however*, that Buyer will retain all rights to Environmental Credits related to the Host or the generation of electric power therefrom, including any increased electric power generated at the Host enabled as a result of the transactions contemplated in this Agreement.

4.5 Late Payments. Any amounts payable by one Party to the other under this Agreement that are not paid when due will bear interest at the Interest Rate from the date such payment was due until the date such payment is actually paid.

4.6 Netting of Payments. The Parties hereby agree that they will discharge mutual undisputed debts and payment obligations due and owing to each in the same month through netting, in which case all amounts owed by each Party to the other Party for such monthly period, including any related payments calculated pursuant to Article 14, interest, and payments or credits, will be netted so that only the excess amount remaining due will be paid by the Party that owes it.

### ARTICLE 5 METERING

#### 5.1 Steam Monitoring and Metering.

(a) Seller will install, at its sole cost, (i) a meter at the Steam Delivery Point to determine the amount of Steam delivered to the Steam Delivery Point by Seller (the "Steam Flow Meter"); (ii) an instrument to measure Steam pressure located near the Steam Flow Meter; and (iii) an instrument to be installed near the Steam Flow Meter to measure the delivered Steam temperature. The Steam Flow Meter will continuously measure the flow of Steam delivered from the Facility to the Host. The Steam pressure instrument and the Steam temperature instrument will continuously measure the pressure and temperature of Steam delivered from the Facility to Buyer's Host. Seller will provide, at no cost to the Buyer, an access point to information from the Steam Flow Meter to enable Buyer to monitor the flow in as close to real time as is reasonably possible. Seller will operate, service, maintain, and replace (as needed), at Seller's expense, the Steam Flow Meter during the Delivery Term.



(b) The Steam Flow Meter will be sealed by both Parties, and such seal will be broken only by both Parties for inspection, testing or adjustment of the Steam Flow Meter.

## 5.2 Meter Testing.

(a) Seller will be responsible for reading, testing, servicing and maintaining the Steam Flow Meter. The Steam Flow Meter will conform to Prudent Operating Practices, and Seller will cause the Steam Flow Meter to be tested and calibrated no less often than once each Contract Year in accordance with Prudent Operating Practices. Seller will provide Buyer with not less than 14 days prior notice of such tests as well as with copies of all test reports and results as soon as they are available, and Buyer will have the right to have a representative present during any such test. Either Party may, not more frequently than once each Contract year, request a retest of the Steam Flow Meter if such Party has reasonable cause to believe that the accuracy of the Steam Flow Meter does not conform to Metering Tolerances. The Party requesting any such retest will pay for such retest and will provide the other Party with reasonable prior notice of such retest. Such other Party will have the right to have a representative present during such retest. The Party requesting any test or retest of the meters hereunder will pay the full cost and expense of conducting such test or retest, except that if any tested or retested meter is found to be not accurate within Metering Tolerances and such inaccuracy results in a payment being made to either Party, the Party making such payment will pay the full cost and expense of conducting such tests.

(b) If, for any reason, any meter is out of service or out of repair, or if any tested or retested meter is found to be not accurate within Metering Tolerances, Seller will promptly arrange for the repair, correction or replacement of the meter, at Seller's expense, and the Parties will use the measurements from (any) back-up meters to determine the amount of the inaccuracy. If there are no back-up meters or if the back-up meters are not in service or are found not to be accurate within the Metering Tolerances and the Parties cannot otherwise agree as to the amount of the inaccuracy, the inaccuracy will be determined, using as the basis therefor the best data available, (i) by calibration, test or mathematical calculation, if the percentage of inaccuracy is ascertainable by calibration, test or such calculation, or (ii) by such other method as is in accordance with Prudent Operating Practices in general use in the CHP industry.

(c) Any amounts payable by Buyer or to be refunded by Seller as a result of any faulty measurements by any meter that is not accurate within the Metering Tolerances will be paid or refunded by such Party within 30 days after discovery of such inaccuracy.

(d) Seller will provide Buyer with reasonable access to the Steam Flow Meter for the purpose of monitoring and verifying the accuracy of measurements made by such meters. Buyer will provide Seller with reasonable advance notice of any access by Buyer to the Steam Flow Meter, and Buyer and Seller will coordinate such access so as to minimize interruption to Seller's business activities. Seller will be entitled to have a representative accompany Buyer at all times during any such access by Buyer.

5.3 Meter Data. Seller will transmit to Buyer on a monthly basis an electronic data file containing the monthly metered quantity of Steam quantity for the relevant month at the same time that Seller provides Monthly Invoices under Section 4.2.

## ARTICLE 6 CONDENSATE AND MAKE-UP WATER

### 6.1 Return of Condensate.

(a) Buyer will, at its sole cost and expense, return Condensate to Seller during the Delivery Term at the Condensate Delivery Point, solely for use at the Facility, in a mass quantity equivalent to at least 70% of the mass quantity of the Steam delivered to Buyer.

(b) Buyer will ensure that the Condensate supplied by Buyer to Seller under this Agreement meets the specifications set forth in Exhibit A, and is not contaminated with oil, excess rust, or other foreign substances that would make the Condensate unsuitable for production of Steam at the Facility. If any component of the Condensate becomes contaminated prior to return to Seller, Buyer will notify Seller promptly of such contamination and correct the source or cause of such contamination as quickly as practicable at Buyer's sole cost and expense. Buyer will pay any cost reasonably incurred by Seller to treat Condensate until such required corrections or modifications are made. If the cost of treating the Condensate exceeds its monetary value, Seller will, at its option, either dispose of such Condensate or require that Buyer dispose of such Condensate, in each case at Buyer's sole cost and expense.

(c) Buyer will obtain and maintain, at its sole cost and expense, any and all Permits required to procure and deliver Condensate in a quantity and quality sufficient to satisfy the requirements of Buyer under this Agreement. Seller will reasonably cooperate with and assist Buyer, at Buyer's cost and expense, in obtaining and maintaining such Permits.

6.2 Supply of Make-Up Water. Buyer will be responsible for procuring and delivering to Seller, at Buyer's sole cost and expense, any Make-Up Water that is required at any time to produce the maximum mass quantity of Steam that the Facility is reasonably capable of producing at such time.

## ARTICLE 7 INTERCONNECTION FACILITIES

### 7.1 Steam Interconnection Facilities.

(a) Seller will, at its sole cost and expense, install, own, operate, maintain, repair, and, as necessary, replace any portion of the Steam Interconnection Facilities located on the Site.



(b) Buyer will, at its sole cost and expense, install, own, operate, maintain, repair, and, as necessary, replace any portion of the Steam Interconnection Facilities located on the Host Premises.

**7.2 Condensate Interconnection Facilities.**

(a) Seller will, at its sole cost and expense, install, own, operate, maintain, repair, and, as necessary, replace any portion of the Condensate Interconnection Facilities on the Site.

(b) Buyer will, at its sole cost and expense, install, own, operate, maintain, repair, and, as necessary, replace any portion of the Condensate Interconnection Facilities located on the Host Premises.

**7.3 Approval of Changes in Interconnection Facility Locations.** If Buyer wishes to change the location of any Interconnection Facilities located on the Host Premises, or if Seller wishes to change the location of any Interconnection Facilities located on the Site, the Party wishing to make such change will notify the other Party of such proposed change, and with provide with such notice sufficiently detailed specifications regarding the proposed change to permit the other Party to analyze appropriately the reasonably likely ramifications, including costs to such other Party, of such changes. The Party receiving such notice will approve the proposed changes or provide comments thereon within 15 days after receipt of such notice. If the Party receiving notice of the proposed change provides comments on any aspect of the proposed change, then the Parties will meet within 15 days after delivery of such comments to seek to resolve any issues between the Parties. Buyer and Seller will seek diligently and in good faith to reach agreement on any such matters. Whenever a Party's approval is required under the terms of this Section 7.3, such approval will not be unreasonably withheld or delayed; *provided, however*, that a Party will be deemed reasonable in withholding its approval of any changes in the location of any Interconnection Facilities that might interfere with or impair the safe and efficient operation of such Party's premises or facilities.

**ARTICLE 8  
OPERATIONS, SCHEDULING; NOTICE OF PLANNED OUTAGES**

**8.1 Notice Generally.**

(a) Seller will provide notice to Buyer as soon as practicable of any outages of the Facility that are not Planned Outages and, as soon as practicable and when reliable information becomes available, provide Buyer with a schedule (date and hour of day) as to when the Facility is expected to return to service. Seller will provide Buyer with updates of the status and changes in the expected schedule of the Facility during such outages when such information becomes available in a reliable form.

(b) Buyer will provide notice to Seller as soon as practicable of any outages of the Host that are not Planned Outages and, as soon as practicable and when reliable information becomes available, provide Seller with a schedule (date and hour of day) as to when the Host is expected to return to service. Buyer will provide Seller with updates

of the status and changes in the expected schedule of the Host during such outages when such information becomes available in a reliable form.

## 8.2 Planned Outages.

(a) Not later than 90 days prior to the end of each Contract Year, Seller will prepare and provide to Buyer, for Buyer's review and comment, a proposed annual operating and maintenance plan for the next Contract Year, including proposed Planned Outage periods for the Facility and the Host. In scheduling Planned Outage periods for the Facility during each Contract Year, Seller will take into account the periods of Buyer's peak demand for Steam. To the extent commercially practicable, Seller will coordinate and schedule its Planned Outages of the Facility to coincide with the Buyer's Planned Outages of the Host. Seller will amend the proposed annual operating and maintenance plan to take into account any comments of Buyer regarding Planned Outage periods and expected downtime, and processes to address emergencies and unscheduled downtime, that are consistent with Prudent Operating Practices.

(b) Seller will provide notice to Buyer of any Planned Outages of the Facility that are not included in any annual operating and maintenance plan but that Seller reasonably determines are necessary in order to operate and maintain the Facility in accordance with Prudent Operating Practices and that will interfere with or reduce the provision of Steam to Buyer, *provided* that (i) Seller will give as much notice as is possible under the circumstances, and in any event at least 30 days' notice, of such Planned Outage, and (ii) such interference or reduction will be only to the extent and for the duration reasonably required by such outage or overhaul.

(c) Buyer will provide notice to Seller of any Planned Outages of the Host that are not included in any annual operating and maintenance plan but that Buyer reasonably determines are necessary in order to operate and maintain the Host in a commercially reasonable manner and that will interfere with or reduce the provision of Condensate or Utilities to Seller, *provided* that (i) Buyer will give as much notice as is possible under the circumstances, and in any event at least 30 days' notice, of a such Planned Outage, and (ii) such interference or reduction will be only to the extent and for the duration reasonably required by such outage or overhaul.

(d) The Parties acknowledge and agree that nothing in this Section 8.2 is intended to alter in any way any fixed monthly Steam payment obligation of Buyer as set forth in Exhibit C.

## ARTICLE 9 PERMITS

### 9.1 Responsibility for Obtaining Permits.

(a) Each Party will, promptly following the Effective Date, make application for all Permits not previously applied for or obtained and required for such Party's performance of its obligations under this Agreement, including the Permits listed on



Exhibit E. Each Party will make timely and good faith efforts to secure all such Permits and will advise the other Party promptly after all such Permits have been received.

(b) A Party will not be deemed to be in breach of its obligations to obtain any Permit from any Governmental Authority to the extent that such Party is in good faith contesting the application, interpretation, order or other legal direction that would mandate a Party to obtain such Permit or the decision of any Governmental Authority with respect thereto.

## 9.2 Maintenance of Permits.

(a) Seller will maintain in effect during the Term all Permits that are required for the construction, development, operation, and maintenance of the Facility in accordance with the requirements of this Agreement and for the performance by Seller of its other obligations hereunder.

(b) Buyer will maintain in effect during the Term all Permits that are required for the construction, development, operation, and maintenance of the Host in accordance with the requirements of this Agreement and for the performance by Buyer of its other obligations hereunder.

## ARTICLE 10 COMPLIANCE WITH APPLICABLE LAW

10.1 Compliance with Applicable Laws. Seller will at all times comply with all applicable Laws to which it or any part of the Facility may be subject. Buyer will at all times comply with all applicable Laws to which it or any part of the Host may be subject. A Party will not be deemed to be in breach of its obligations to comply with any applicable Laws to the extent that such Party is in good faith contesting the application, interpretation, order or other legal direction pursuant to which it, the Facility or the Host, as applicable, would be rendered subject to any such applicable Laws or the Order of any Governmental Authority with respect thereto.

10.2 Compliance with Orders. If a Party is subject to the jurisdiction of any Governmental Authority, then, subject to Section 2.3 or Section 2.4, as applicable, such Party agrees to abide by any and all applicable Orders issued by such Governmental Authority.

## ARTICLE 11 REPRESENTATIONS AND WARRANTIES

### 11.1 Representations of Seller.

(a) Seller is a limited liability company duly formed, validly existing and in good standing under the Laws of its jurisdiction of formation. Seller is duly qualified or licensed to do business in each other jurisdiction where the actions to be performed by it hereunder makes such qualification or licensing necessary, except in those jurisdictions where the failure to be so qualified or licensed would not reasonably be expected to result in a material adverse effect on Seller's ability to perform such actions under this Agreement.

(b) Seller has all requisite limited liability company power and authority to execute and deliver this Agreement and any related agreements to which it is a party, to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery by Seller of this Agreement and the related agreements to which Seller is a party, and the performance by Seller of its obligations hereunder and thereunder, have been duly and validly authorized by all necessary limited liability company action. This Agreement and each related agreement to which Seller is a party has been duly and validly executed and delivered by Seller and constitutes the legal, valid and binding obligation of Seller enforceable against Seller in accordance with its terms, except as the same may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, arrangement, moratorium or other similar Laws relating to or affecting the rights of creditors generally, or by general equitable principles.

(c) The execution and delivery by Seller of this Agreement and the related agreements to which Seller is a party do not and will not, and the performance by Seller of its obligations under this Agreement and the related agreements to which Seller is a party does not and will not:

(i) conflict with or result in a violation or breach of any of the terms, conditions or provisions of the organizational documents of Seller;

(ii) subject to the satisfaction of the Seller Conditions Precedent set forth in Section 2.4, be in violation of or result in a breach of or default (or give rise to any right of termination, cancellation or acceleration) under (with or without the giving of notice, the lapse of time, or both) any material contract or Permit to which Seller is a party, except for any such violations or defaults (or rights of termination, cancellation or acceleration) that would not, in the aggregate, reasonably be expected to result in a material adverse effect on Seller's ability to perform its obligations hereunder; and

(iii) subject to the satisfaction of the Seller Conditions Precedent set forth in Section 2.4, and assuming any other notifications provided in the ordinary course of business have been made, obtained or given, (i) conflict with, violate or breach any term or provision of any applicable Law, except as would not reasonably be expected to result in a material adverse effect on such Seller's ability to perform its obligations hereunder or (ii) require any consent or approval of any Governmental Authority, or notice to, or declaration, filing or registration with, any Governmental Authority, under any applicable Law, other than such consents, approvals, notices, declarations, filings or registrations that, if not made or obtained, would not reasonably be expected to result in a material adverse effect on Seller's ability to perform its obligations hereunder.

(d) Seller has not been served with notice of any Claim, no Claim is pending, and, to Seller's knowledge no Claim is threatened against Seller, which seeks an Order restraining, enjoining or otherwise prohibiting or making illegal any of the transactions contemplated by this Agreement.



(e) Seller is not in violation of, or in default under, any applicable Law or Order, the effect of which, in the aggregate, would reasonably be expected to hinder, prevent or delay Seller from performing its obligations under this Agreement.

#### 11.2 Representations of Buyer.

(a) Buyer is a State institution of higher education, validly existing and in good standing under the Laws of its jurisdiction of formation. Buyer is duly qualified or licensed to do business in each other jurisdiction where the actions to be performed by it hereunder makes such qualification or licensing necessary, except in those jurisdictions where the failure to be so qualified or licensed would not reasonably be expected to result in a material adverse effect on Buyer's ability to perform such actions under this Agreement.

(b) Buyer has all requisite power and authority to execute and deliver this Agreement and any related agreements to which it is a party, to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery by Buyer of this Agreement and the related agreements to which Buyer is a party, and the performance by Buyer of its obligations hereunder and thereunder, have been duly and validly authorized by all necessary Board of Trustee action. This Agreement and each related agreement to which Buyer is a party has been duly and validly executed and delivered by Buyer and constitutes the legal, valid and binding obligation of Buyer enforceable against Buyer in accordance with its terms, except as the same may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, arrangement, moratorium or other similar Laws relating to or affecting the rights of creditors generally, or by general equitable principles.

(c) The execution and delivery by Buyer of this Agreement and the related agreements to which Buyer is a party do not and will not, and the performance by Buyer of its obligations under this Agreement and the related agreements to which Buyer is a party does not and will not:

(i) conflict with or result in a violation or breach of any of the terms, conditions or provisions of the statutory responsibilities and obligations of Buyer;

(ii) subject to the satisfaction of the Buyer Conditions Precedent set forth in Section 2.3, be in violation of or result in a breach of or default (or give rise to any right of termination, cancellation or acceleration) under (with or without the giving of notice, the lapse of time, or both) any material contract or Permit to which Buyer is a party, except for any such violations or defaults (or rights of termination, cancellation or acceleration) that would not, in the aggregate, reasonably be expected to result in a material adverse effect on Buyer's ability to perform its obligations hereunder; and

(iii) subject to the satisfaction of the Buyer Conditions Precedent set forth in Section 2.3, and assuming any other notifications provided in the ordinary course of business have been made, obtained or given, (i) conflict with, violate or

breach any term or provision of any applicable Law, except as would not reasonably be expected to result in a material adverse effect on such Buyer's ability to perform its obligations hereunder or (ii) require any consent or approval of any Governmental Authority, or notice to, or declaration, filing or registration with, any Governmental Authority, under any applicable Law, other than such consents, approvals, notices, declarations, filings or registrations that, if not made or obtained, would not reasonably be expected to result in a material adverse effect on Buyer's ability to perform its obligations hereunder.

(d) Buyer, to the best of its knowledge, has not been served with notice of any Claim, no Claim is pending, and, to Buyer's knowledge no Claim is threatened against Buyer, which seeks an Order restraining, enjoining or otherwise prohibiting or making illegal any of the transactions contemplated by this Agreement.

(e) Buyer, to the best of its knowledge, is not in violation of, or in default under, any applicable Law or Order, the effect of which, in the aggregate, would reasonably be expected to hinder, prevent or delay Buyer from performing its obligations under this Agreement.

11.3 Buyer Disclosure Obligations with Respect to Environmental Matters. Promptly after a Party becomes aware of any Existing Environmental Conditions, any violation of any Environmental Laws arising out of the construction or operation of the Host, or any Environmental Noncompliance at the Host or on the Host Premises, and any claims or actions relating to any of the same by any Governmental Authority having jurisdiction over the Host Premises, or the existence of any past or present enforcement, legal, or regulatory action or proceeding relating to such alleged Environmental Noncompliance or alleged presence of Hazardous Materials, such Party will promptly disclose such information to the other Party.

11.4 No Other Warranties. THERE ARE NO WARRANTIES UNDER THIS AGREEMENT EXCEPT TO THE EXTENT SPECIFICALLY SET FORTH IN THIS AGREEMENT. THE PARTIES HEREBY SPECIFICALLY DISCLAIM AND EXCLUDE ANY AND ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING THE FOREGOING, EXCEPT TO THE EXTENT OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, SELLER MAKES NO OTHER WARRANTIES AS TO THE CONSTRUCTION, OPERATION OR PERFORMANCE OF THE FACILITY OR THE EQUIPMENT THEREIN, INCLUDING ITS INTERCONNECTION FACILITIES, THE CONFORMANCE TO THE APPROVED SPECIFICATIONS THEREOF OR THE SUITABILITY THEREOF FOR THEIR INTENDED PURPOSE. BUYER MAKES NO WARRANTIES AS TO THE CONSTRUCTION OF ITS INTERCONNECTION FACILITIES, THEIR CONFORMANCE TO THE APPROVED SPECIFICATIONS THEREFOR OR THEIR SUITABILITY FOR THEIR INTENDED PURPOSE. IN NO EVENT WILL EITHER PARTY'S LIABILITY WITH RESPECT TO THE FAILURE OF ANY EXPRESS WARRANTIES HEREUNDER EXCEED THE REPLACEMENT PRICE OF THE APPLICABLE EQUIPMENT OR INTERCONNECTION FACILITY.



## ARTICLE 12

### FORCE MAJEURE EVENT; CHANGE IN LAW

12.1 Effect of Force Majeure Event. To the extent either Party is prevented by Force Majeure Event from carrying out, in whole or part, its obligations under this Agreement and such Party (the "Claiming Party") gives notice and details of the Force Majeure Event to the other Party as soon as practicable, then the Claiming Party will be excused from the performance of its obligations under this Agreement (other than the obligation to make payments then due or becoming due with respect to performance prior to the Force Majeure Event). The Claiming Party will give prompt notice to the other Party of the Force Majeure Event and the extent of the Claiming Party's inability to fulfill its obligations under this Agreement. If the Claiming Party provides such notice orally, the Claiming Party will promptly follow such oral notice with written notice provided in accordance with the requirements of this Agreement. The Claiming Party will use commercially reasonable efforts to (a) remove or remedy such inability to perform within a reasonable period of time, and (b) mitigate the impacts on the other Party of such inability to perform. The non-Claiming Party will not be required to perform or resume performance of its obligations to the Claiming Party corresponding to the obligations of the Claiming Party excused by Force Majeure Event.

12.2 Notice of Force Majeure Event. The Claiming Party will (a) promptly notify the other Party upon the occurrence of any Force Majeure Event, which notice will indicate the scope and cause of the Force Majeure Event and the anticipated period of impact of such Force Majeure Event, (b) promptly provide such available information about the Force Majeure Event and its impact as may be reasonably requested by the other Party and (c) provide updated information regarding such Force Majeure Event and its impact from time to time as reasonably requested or periodically (but not less than once per month) until such Force Majeure Event and its impact on the obligations of the Claiming Party cease to exist. When the Claiming Party is able to resume performance of its obligations under this Agreement, it will give the other Party written notice and the Parties will resume performance under this Agreement. Subject to Section 2.2(c)(ii) and Section 12.4, if any Force Majeure Event excuses performance of the Parties' obligations under this Agreement for a period in excess of 30 days, the Term will be extended for a period equal to the period of such excuse of performance. The Parties will amend this Agreement in writing to reflect any such extension of the Term.

#### 12.3 Scope of Force Majeure Event.

(a) The suspension of performance by a Party due to a Force Majeure Event will be of no greater scope and no longer duration than that which is necessary. The Party claiming that a Force Majeure Event has occurred will use its commercially reasonable efforts to cure the cause(s) preventing its performance of this Agreement. When the non-performing Party is able to resume performance of its obligations under this Agreement, it will immediately give the other Party written notice to that effect and will resume performance under this Agreement as soon as practicable after such notice is delivered.

(b) The settlement of strikes, lockouts and other labor disputes will be entirely within the discretion of the affected Party and such Party will not be required to settle

such strikes, lockouts or other labor disputes by acceding to demands which such Party deems to be unreasonable in its sole and absolute discretion.

12.4 Termination for Extended Force Majeure. If a Force Majeure Event prevents the Claiming Party from performing a material obligation of such Party under this Agreement for a period of 12 consecutive months, then the other Party will have the right to terminate this Agreement by written notice to the Claiming Party, in which case this Agreement will terminate 90 days after the date of such termination notice unless, within such 90-day period, (a) full performance has resumed hereunder or the Party giving the termination notice has withdrawn such notice or (b) the Claiming Party demonstrates, to the reasonable satisfaction of the other Party, that the Claiming Party is exercising sustained and diligent efforts to overcome the effects of the Force Majeure Event and reasonably expects that the Claiming Party will be able, within a period of 6 months from the end of such 90-day period, to resume performance of the obligations affected by the Force Majeure Event. Upon the effective date of such termination, neither Party will have any further rights or obligations under this Agreement, except those rights and obligations arising before the effective date of such termination and as provided in Section 14.10. Further, neither Party will be liable to the other Party for any Termination Payment or otherwise owe to the other Party any damages of any kind for or as a result of such termination; *provided, however*, that such termination will not relieve either Party of any obligations or any liability arising under or in connection with this Agreement prior to such termination.

12.5 Change in Law.

(a) Without limiting any other provision of this Agreement, if either Party (the "Affected Party") reasonably determines that the Change in Law Costs caused by, resulting from or arising out of an Change in Law are reasonably quantifiable, and that the amount of any Change in Law Costs is reasonably likely to equal or exceed the Change in Law Threshold Amount, then, not later than 15 Business Days following any request from the Affected Party, the Parties will commence to negotiate in good faith regarding any adjustments that should be made to the amounts payable under this Agreement to compensate the Affected Party for such Change in Law Costs (including, if any Changes in Law require one-time capital improvements in connection with the Facility, the terms on which the applicable Change in Law Costs are to be amortized over the remainder of the Term). Prior to such negotiations, the Affected Party will provide the other Party with documentation reasonably evidencing the Affected Party's calculation of such Change in Law Costs, and an opportunity to discuss such documentation with the Affected Party. If the Parties, within a period of 60 days following the Affected Party's request for negotiation regarding the Change in Law Costs, reach agreement that such Change in Law Costs are reasonably likely to exceed the Change in Law Threshold Amount, and regarding any adjustments that should be made to the amounts payable under this Agreement to compensate the Affected Party for such Change in Law Costs, Seller will petition the SCPSC for approval of such adjustments to this Agreement. If the Parties do not, within a period of 60 days following the Affected Party's request for negotiation regarding the Change in Law Costs, reach agreement that such Change in Law Costs are reasonably likely to exceed the Change in Law Threshold Amount, or regarding any adjustments that should be made to the amounts payable under this Agreement to compensate the Affected Party for such



Change in Law Costs, the Affected Party will refer the matter to the South Carolina Office of Regulatory Staff (ORS) for mediation, pursuant to the statutory function of the ORS set forth in S.C. Code Ann. § 58-4-50(A)(9). If, within a period of 60 days following submission of the Affected Party's request for mediation, the Parties reach agreement that such Change in Law Costs are reasonably likely to exceed the Change in Law Threshold Amount, and regarding any adjustments that should be made to the amounts payable under this Agreement to compensate the Affected Party for such Change in Law Costs, either Seller (if only Seller is eligible) or both Parties (if both Parties are eligible) will petition the SCPSC for approval of such adjustments to this Agreement. If the Parties do not, within a period of 60 days following submission of the Affected Party's request for mediation regarding the Change in Law Costs, reach agreement that such Change in Law Costs are reasonably likely to exceed the Change in Law Threshold Amount, or regarding any adjustments that should be made to the amounts payable under this Agreement to compensate the Affected Party for such Change in Law Costs, the Affected Party will be entitled at any time thereafter, in its sole and absolute discretion, effective 365 days following notice from the Affected Party to the other Party, and without any liability whatsoever (including liability for any Termination Payment) on the part of the Affected Party to the other Party or any other Person, to terminate this Agreement, notify the SCPSC of said termination and request any State Regulatory Approvals that may be required to approve, ratify or confirm such termination.

(b) The Change in Law Threshold Amount will constitute a threshold to any sharing by the non-Affected Party in Change in Law Costs, but will not constitute a deductible amount unless otherwise agreed by the Parties. Once the aggregate Change in Law Costs have equaled or exceeded the Change Event Threshold Amount, the non-Affected Party will, subject to satisfaction of the requirements of Section 12.5(a), be responsible for the non-Affected Party's agreed share of any and all Change in Law Costs (unless otherwise agreed by the Parties).

(c) If, following the Effective Date, applicable Law imposes any enforceable and unappealable limits or other enforceable and unappealable compliance obligations related to emissions produced from the combustion of fuel by the Facility, and such limits or obligations are reasonably likely to have a substantial and materially adverse impact on the economics of this Agreement to Seller or Seller's rights and obligations under this Agreement, then the following will apply:

(i) Upon the occurrence of any event described in Section 12.5(c) above, Seller will promptly transmit to Buyer a copy or notice thereof, as appropriate, and will, within 10 days after delivery of such notice, give to Buyer an explanation in reasonable detail indicating why the terms and conditions of such limits or obligations are reasonably likely to have a material adverse effect on the economics of this Agreement to Seller or Seller's rights and obligations under this Agreement, including an analysis in appropriate detail showing the economic impact of such limits or obligations upon Seller;

(ii) If Buyer so chooses, Buyer and Seller will meet and negotiate in good faith to determine if appropriate alterations to this Agreement or other arrangements can be agreed to that will address the operational or economic issues caused by such limits or obligations; and

(iii) If the Parties are unable or unwilling to reach agreement pursuant to Section 12.5(c)(ii), Seller will have the right to terminate this Agreement, without liability or any further obligations to Buyer, upon 365 days prior written notice to Buyer and may notify the SCPSC of said termination and request any State Regulatory Approvals that may be required to approve, ratify or confirm such termination.

### ARTICLE 13 INSURANCE

#### 13.1 Required Insurance.

(a) Seller will maintain during the term of this Agreement, and will require any general contractor of Seller retained to perform significant construction or demolition work at the Facility or on the Site to maintain during the term of such work, the insurance coverage set forth below with insurance companies having an A.M. Best credit rating of "A-, VII" or better, with minimum coverage limits indicated below on policies issued on an "occurrence" basis, and naming Buyer and Seller, and their respective officers, directors, shareholders, agents, independent contractors and Affiliates as additional insureds for ongoing and completed operations on all policies except workers compensation and employers liability:

(i) Umbrella insurance coverage in the amount of \$5,000,000 and excess or umbrella liability insurance coverage with a limit of not less than \$5,000,000 per occurrence and per project. These limits will apply in excess of each of the below mentioned policies;

(ii) Workers' compensation insurance (or qualification as a self-insurer) covering its employees in amounts at least equal to the minimum coverage amounts provided under the laws of South Carolina, notwithstanding any provision limiting requirements to a particular number of employees. Seller will provide for, or require any Subcontractor (as defined below) to maintain, similar coverage for the Subcontractor's employees employed in connection with this Agreement;

(iii) Employers' liability insurance that covers both "bodily injury by accident" and "bodily injury by disease" with limits of not less than \$1,000,000 each accident/\$1,000,000 disease policy limit/\$1,000,000 each employee;

(iv) Commercial general liability insurance that covers bodily injury, personal injury, and property damage, including products liability and contractual liability coverage, with per occurrence limits of not less than \$1,000,000 and an aggregate limit of not less than \$2,000,000 and (x) which will include



“contractual” coverage for the indemnity clause set forth in Article 16 below and Article 12 of the Lease and (y) with coverage written on a primary and non-contributory basis;

(v) Automobile liability insurance coverage (including coverage for claims against Buyer for injuries to employees of Seller or any of its Subcontractors) for owned, non-owned, and hired autos with a limit of not less than \$1,000,000 per accident;

(vi) Commercial property insurance insuring all improvements, fixtures and personal property located on the Site from time to time in an amount equal to 100% of the full replacement cost thereof, subject to a deductible reasonably acceptable to Buyer; said commercial property insurance policy will insure against the perils of fire and extended coverage and will include “special form” property insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief; and

(vii) During any period within which any construction or installation of any improvements, fixtures or personal property at the Site is taking place, “special form” builder's risk insurance upon such improvements, fixtures or personal property to the full replacement value thereof. Said builder's risk insurance policy will insure against the perils of fire and extended coverage and will include “special form” builder's risk insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief.

(b) Seller agrees to make Buyer an additional insured on Seller's commercial general liability and automobile liability policies, and will provide Buyer with copies of policy endorsements reflecting Buyer's status as an additional insured thereunder. Insurance coverage provided by Seller under this section will not include any of the following: (i) any claims made insurance policies; (ii) any self-insured retention or deductible amount greater than \$250,000.00, unless approved in writing by Buyer; (iii) any endorsement limiting coverage available to Buyer which is otherwise required by this section; and (iv) any policy or endorsement language that (A) limits the duty to defend Buyer under the policy or (B) provides coverage to Buyer only if Seller is negligent.

(c) Notwithstanding the minimum limits of coverage set forth above, Seller will name Buyer, its officers, directors, employees, subsidiaries, successors, and assigns as additional insureds for the full limits of insurance coverage purchased by Seller. The additional insured coverage provided pursuant to this Section 13.1(c) will provide coverage to Buyer for all claims, losses, demands, liens, causes of action or suits, judgments, fines, assessments, liabilities, damages and injuries (including death) covered by Article 16. Seller is responsible for payment of all deductibles, self-insured retentions or similar charges for the additional insured coverage required pursuant to this Section 13.1(c).

(d) Prior to commencing operations hereunder, and thereafter upon Buyer's reasonable request, Seller will provide to Buyer a certificate of insurance evidencing Seller's compliance with the requirements of this Section 13.1, bearing applicable endorsements and specifically stating that such insurance will provide prior notice to Buyer in the event of cancellation or any material change of such insurance policies. Seller also agrees to provide Buyer with a copy of any such notice it receives from its insurance company promptly after receiving such notice. Seller hereby agrees that if it fails to furnish the policy endorsements or the certificates of insurance required hereunder, or if Buyer receives notice that any policy of insurance issued to Seller has been canceled or no longer meets the requirements of this Section 13.1, then Buyer (i) may suspend this Agreement until insurance is obtained; (ii) may terminate this Agreement immediately for cause; or (iii) may, but will have no obligation to, obtain forced placement insurance that meets the requirements of this Section 13.1 at Seller's sole cost from any broker or insurer satisfactory to Buyer.

13.2 Right to Self-Insure. Notwithstanding anything herein to the contrary, and except as provided in this Section 13.2, Seller will have the right to self-insure as to any insurance required under this Agreement, *provided* that with respect to any self-insurance by Seller:

(a) such self-insurance by Seller is permitted by all Laws and Orders affecting the Site and the Facility or otherwise applicable to Seller;

(b) Seller will maintain a tangible net worth of at least \$500,000,000;

(c) such self-insurance program will be reasonably acceptable to Buyer;

(d) Seller will maintain loss histories and will establish and maintain reserves adequate to cover losses projected by such loss histories;

(e) Seller will protect Buyer to the same extent as it would if it had the commercial general liability policy required hereunder;

(f) Seller will provide annually to Buyer and Buyer's mortgagee a certificate indicating its decision to self-insure, which certificate will certify that Seller's net worth is not less than \$500,000,000. In addition, simultaneously with the delivery of said notice, Seller will deliver to Buyer and Buyer's mortgagee, if any, unaudited financial statements of Seller for Seller's most recent fiscal year, which financial statements will be prepared in accordance with GAAP and certified as true and correct by an officer of Seller; and

(g) Seller will continue to maintain such self-insurance after the expiration or termination of this Agreement for a period of not less than 3 years. The minimum amounts of insurance coverage required hereunder will not be construed to create a limit on Seller's liability with respect to its indemnification obligations hereunder.

The foregoing right of Seller to self-insure will not apply with respect to insurance coverage related to accidental death and dismemberment, which policy will at all times be maintained with



a third party provider and will consist of coverage that is consistent with the requirements set forth in Section 13.1(a)(iv).

### 13.3 Subcontractors.

(a) Seller may hire or engage one or more subcontractors or other third parties (each, a "Subcontractor") to perform a portion of its obligations under this Agreement; *provided*, that: Seller will ensure that each Subcontractor's employees have received appropriate training to handle the tasks proposed to be undertaken by such employees at the Site, and have received instruction with respect to the security and safety precautions to be observed and taken at the Site;

(b) Seller will remain responsible for the acts and omissions of each Subcontractor as if those acts or omissions were Seller's own acts and omissions, including each Subcontractor's compliance with the terms and conditions of this Agreement; and

(c) Seller will ensure that each Subcontractor maintains the following types of insurance in at least the following amounts:

(i) Workers' compensation insurance satisfying applicable statutory limits;

(ii) Employer's liability insurance with the following minimum limits: \$1,000,000 each accident for bodily injury by accident, \$1,000,000 each employee for bodily injury by disease, and \$1,000,000 aggregate policy limit for bodily injury by disease;

(iii) Commercial general liability insurance with the following minimum limits: \$2,000,000 general aggregate per project, \$2,000,000 premises, products and completed operations aggregate, \$2,000,000 bodily injury/property damage per occurrence, and \$2,000,000 personal injury and advertising injury limit, with products completed operations coverage provided for not less than 3 years from the date of final completion of the applicable project; and

(iv) Automobile liability covering any Seller auto (including owned, non-owned and hired autos), with minimum required limits of \$1,000,000 combined single limit each accident.

13.4 Right to Cure. If a Party fails to procure or maintain any insurance required pursuant to Section 13.1, the other Party will have the right, but not the obligation, upon not less than 30 days prior written notice from such other Party to the non-performing Party, to procure such insurance on behalf of the non-performing Party and in any such event such other Party will be entitled to recover the premiums paid for such insurance as an amount due under this Agreement.

## ARTICLE 14 DEFAULT AND TERMINATION

14.1 Events of Default. The occurrence at any time with respect to a Party of any of the following events constitutes an event of default (an “Event of Default”) with respect to such Party (the “Defaulting Party”):

- (a) The failure to make, when due, any payment required pursuant to this Agreement, if such failure is not remedied within 10 days after written notice;
- (b) Any representation or warranty made by such Party in this Agreement is false or misleading in any material respect when made or when deemed made or repeated which is not remedied within 10 days after written notice;
- (c) The failure to perform any material covenant or obligation set forth in this Agreement (other than to the extent constituting a separate Event of Default), if such failure is not remedied within 30 days after written notice or, if such performance cannot reasonably be completed within said 30-day period, failure to commence the performance within such 30-day period and to pursue the same diligently to completion;
- (d) Such Party becomes Bankrupt;
- (e) A Party’s actual fraud or willful misconduct in connection with this Agreement;
- (f) A Party assigns this Agreement or any of its rights in this Agreement, except as may be permitted under Section 18.1; and
- (g) A Merger Event occurs with respect to such Party.

14.2 Remedies for Event of Default. If an Event of Default will occur and is continuing, the Non-Defaulting Party will have the right (but not the obligation) to pursue any or all of the following remedies:

- (a) Suspend performance of the Non-Defaulting Party’s obligations under this Agreement;
- (b) Subject to the express limitations on remedies set forth in this Agreement, including the provisions of Section 14.7, receive from the Defaulting Party actual and direct damages incurred by the Non-Defaulting Party as a result of or in connection with such Event of Default (including during any applicable cure period, whether or not the Non-Defaulting Party has elected to suspend performance during such cure period); and
- (c) Exercise all other remedies available to the Non-Defaulting Party at law or in equity.

14.3 Termination for an Event of Default. If an Event of Default has occurred and is not cured within the applicable cure period, if any, set forth in Section 14.1, the Non-Defaulting



Party will have the right, at any time when such Event of Default is continuing, and in addition to the remedies set forth in Section 14.2, to:

(a) designate by notice to the Defaulting Party a day, no earlier than the day such notice becomes effective and no later than 20 days after the day such notice becomes effective, on which this Agreement will terminate (the "Early Termination Date");

(b) recover in connection with such termination an amount calculated in accordance with Section 14.5, and

(c) subject to the express limitations on remedies set forth in this Agreement, including the provisions of Section 14.7, pursue any other right or remedy available under this Agreement or applicable Law. If notice of termination has not been received by the date that is 30 days following the last day of any applicable cure period, the Event of Default is waived by the Non-Defaulting Party and no further damages will accrue with respect to such Event of Default.

14.4 Effect of Designation. If notice designating an Early Termination Date is given under Section 14.3, the Early Termination Date will occur on the date so designated, whether or not the relevant Event of Default or Termination Event is then continuing. Upon the occurrence or effective designation of an Early Termination Date, no further payments or deliveries under this Agreement will be required to be made, but without prejudice to the other provisions of this Agreement. The amount, if any, payable in respect of an Early Termination Date will be determined pursuant to Section 14.5.

14.5 Termination Payment. On or as soon as reasonably practicable following the occurrence of an Early Termination Date, the Non-Defaulting Party will determine the Termination Payment, plus (ii) any costs incurred by the Non-Defaulting Party as a result of the termination of this Agreement due to the Defaulting Party's default, plus (iii) any unpaid amounts owing under this Agreement from the Defaulting Party to the Non-Defaulting Party that arose before the Early Termination Date, minus (iv) any unpaid amounts owing under this Agreement from the Non-Defaulting Party to the Defaulting Party, minus (v) any amounts that the Non-Defaulting Party is able to recover pursuant to mitigation under Section 14.9. If the resulting amount is a positive amount, the Defaulting Party will pay such amount to the Non-Defaulting Party. If the resulting amount is a negative amount, such amount will be deemed to be zero and no payment will be made to either Party.

14.6 Additional Rights.

(a) Payment or performance by the Non-Defaulting Party of any of the Defaulting Party's obligations will not waive or cure any breach occasioned by the Defaulting Party's failure or refusal to pay or perform same. Any sums expended by the Non-Defaulting Party in curing any defaults will be repaid by the Defaulting Party to the Non-Defaulting Party within 10 days after demand. Any such sums that are not paid within such 10-day period will bear interest at the Interest Rate.

(b) If either Party is at any time during the Term in default of any of such Party's obligations under the Ground Lease, the other Party will be entitled to suspend performance of any or all of its obligations under this Agreement until such time as the defaulting Party has cured such defaults.

14.7 Remedies Cumulative. The amount determined in accordance with Section 14.5 will be the Parties' sole and exclusive remedy under this Agreement or otherwise for termination for an Event of Default. Subject to the express limitations set forth in the foregoing sentence, each right or remedy of the Parties provided for in this Agreement will be cumulative of and will be in addition to every other right or remedy provided for in this Agreement. A Party's exercise of any one or more of the rights or remedies provided for in this Agreement will not preclude the simultaneous or later exercise by such Party of any or all other rights or remedies provided for in this Agreement.

14.8 Closeout Setoffs. The Non-Defaulting Party will be entitled, at its option and in its discretion, to set off, against any amounts due and owing from the Non-Defaulting Party to the Defaulting Party under this Agreement, any amounts due and owing from the Defaulting Party to the Non-Defaulting Party under this Agreement or any other agreements, instruments or undertakings between the Defaulting Party and the Non-Defaulting Party. The remedy provided for in this section will be without prejudice and in addition to any right of setoff, combination of accounts, lien or other right to which any Party is at any time otherwise entitled (whether by operation of Law, contract or otherwise).

14.9 Duty to Mitigate. Each Party agrees that it has a duty to mitigate damages, and that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance of this Agreement, *provided* that in no event will such mitigation obligations include any requirement that either Party pay any amounts to the other Party. The Parties will exercise commercially reasonable efforts when purchasing or selling, as the case may be, electrical energy or environmental attributes in order to mitigate damages.

14.10 Survival. Notwithstanding any provisions herein to the contrary, any provision hereof which by its terms applies to the period after termination of this Agreement and any provisions hereof necessary to give effect to the intent of the Parties hereunder after the termination or expiration of this Agreement will survive in full force the termination or expiration of this Agreement, including the obligations set forth in Section 2.2, Section 2.3, Section 4.3, Section 4.4, Section 4.5, Article 10, Article 13, Section 14.2, Section 14.3, Section 14.7, Section 14.9, this Section 14.10, Article 15, Article 16 and Article 18 (other than Section 18.1).

## ARTICLE 15 TERMINATION FOR CONVENIENCE

15.1 Termination for Convenience. Notwithstanding any other provision of this Agreement, Buyer shall have the right at any time after the commencement of the eleventh (11<sup>th</sup>) Contract Year to terminate this Agreement by providing notice of termination to Seller, such termination to be effective not less than 180 days after such notice is provided to Seller, and



paying any Termination Payment applicable to the Contract Year in which such termination occurs. See Exhibit D. If in connection with any such termination, Buyer as Landlord under the Ground Lease is no longer able to provide the Utilities, then, prior to any termination of this Agreement under this Section 15.1, Buyer will provide Seller with access and rights of entry for Seller to provide the Utilities for itself, at Seller's sole cost and expense, from the existing facilities at the Host or otherwise. If Buyer terminates this Agreement pursuant to this Section 15.1 and makes any applicable Termination Payment on or before the effective date of such termination, Buyer will not be considered in default of this Agreement or have any other liability to Seller on account of such termination and Seller will have no rights or remedies against Buyer except as expressly provided in this Section 15.1.

15.2 Effect of Termination. Except as provided in Section 14.10, upon a termination of this Agreement pursuant to this Article 15, the Parties will be relieved of all of their respective obligations under this Agreement arising from and after the effective date of such termination; *provided, however*, that such termination will not relieve either Party of any obligations or any liability arising under or in connection with this Agreement prior to such termination.

## ARTICLE 16 INDEMNIFICATION; LIMITATION OF LIABILITY

16.1 Seller Indemnification. Seller (the "Indemnifying Party") agrees to indemnify, defend and hold harmless Buyer (the "Indemnified Party") from and against all claims, demands, damages, losses, liabilities, fines, penalties, judgments, amounts paid in settlement, deficiencies, charges, Taxes, obligations, demands, fees, interest, costs, and expenses (including attorneys' and other professionals' fees) ("Losses") to the extent caused by, resulting from, or arising out of any breach or violation of this Agreement by the Indemnifying Party, any Event of Default with respect to the Indemnifying Party under this Agreement, or any negligence or intentional misconduct by or of the Indemnifying Party, its Affiliates, its directors, officers, employees, or agents. Nothing in this Section 16.1 will affect any liability of either Party to the other for any breach of this Agreement or for any event or occurrence for which any specific remedy is provided hereunder. The indemnification obligations under this Agreement will not be construed to relieve any insurer of its obligation to pay claims consistent with the provisions of any insurance policy.

16.2 Notice of Claims; Procedure. The Indemnified Party will, with reasonable promptness after obtaining knowledge of a third party claim, provide the Indemnifying Party with written notice of the proceedings, claims, demands or assessments that may be subject to indemnification; *provided, however*, that failure to give prompt notice will not adversely affect any claim for indemnification hereunder except to the extent the Indemnifying Party's ability to contest any claim by any third party is materially adversely affected as a result thereof. The notice will include (i) a statement of the basis of the claim for indemnification, including a summary of the facts or circumstances that form the basis for the claim, (ii) a good faith estimate of the amount of Losses, and (iii) copies of any pleadings or demands from the third party. The Indemnifying Party will have 30 days after its receipt of the claim notice to notify the Indemnified Party in writing whether or not the Indemnifying Party agrees that the claim is subject to this Article 16 and, if so, whether the Indemnifying Party elects to undertake, conduct and control, through counsel of its choosing and at its sole risk and expense, the settlement or

defense of the claim. If within 30 days after its receipt of the claim notice, the Indemnifying Party notifies the Indemnified Party that it elects to undertake the settlement or defense of the claim, the Indemnified Party will cooperate with the Indemnifying Party in connection with the settlement or defense of the claim, including by making available to the Indemnifying Party all relevant information and the testimony of employees and agents material to the defense of the claim. The Indemnifying Party will reimburse the Indemnified Party for reasonable out-of-pocket costs incurred in connection with such cooperation. If the Indemnifying Party exercises its right to undertake the settlement or defense of the claim in accordance with the provisions of this Section 16.2 and the Indemnified Party notifies the Indemnifying Party that the Indemnified Party desires to retain separate counsel in order to participate in or proceed independently with such contest, defense or litigation, the Indemnified Party may do so at its own expense. The Indemnified Party will have the right to pay or settle any claim at any time without the consent of the Indemnifying Party; *provided, however*, that if the Indemnifying Party is contesting the claim in good faith and with diligence and the Indemnified Party pays or settles the claim without the Indemnifying Party's consent, the Indemnified Party will be deemed to have waived any right to indemnification with respect to such claim. If the Indemnifying Party does not provide a responsive notice within the 30-day period set forth in this Section 16.2, the Indemnified Party will have the right to contest, settle or compromise the claim at its exclusive discretion, at the Indemnifying Party's sole cost and expense, and the Indemnifying Party will be deemed to have waived any claim, defense or argument that the Indemnified Party's settlement or defense of such claim is in any respect inadequate or unreasonable.

16.3 Survival; Limitations. The indemnity obligations and rights of the Parties set forth in this Article 16 will survive the termination of this Agreement for 2 years after expiration or termination for any reason of this Agreement.

16.4 Insurance Proceeds. If the Indemnifying Party is obligated to indemnify the Indemnified Party under this Article 16, the amount payable to the Indemnified Party will be the amount of the Indemnified Party's Losses net of any insurance proceeds received by the Indemnified Party following a reasonable effort by the Indemnified Party to obtain such insurance proceeds.

16.5 Limitation of Liability. **THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES WILL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY WILL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN, THE OBLIGOR'S LIABILITY WILL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES WILL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. WITHOUT PREJUDICE TO THE CALCULATION OF ANY TERMINATION PAYMENT AMOUNT, NEITHER PARTY WILL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, INCLUDING**



INDIRECT DAMAGES IN THE NATURE OF LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE; *PROVIDED, HOWEVER*, THAT NOTWITHSTANDING THE FOREGOING, IN NO EVENT WILL THE FOREGOING LIMITATIONS OF LIABILITY BE APPLIED TO LIMIT THE EXTENT OF THE LIABILITY OF EITHER PARTY TO THE OTHER FOR OR WITH RESPECT TO ANY INDEMNITY OR OTHER THIRD PARTY CLAIMS OR FOR OR WITH RESPECT TO ANY BREACH OF THE CONFIDENTIALITY PROVISIONS OF THIS AGREEMENT. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS. NOTHING IN THE FOREGOING WILL BE CONSTRUED TO LIMIT ANY LEGAL, EQUITABLE OR STATUTORY RIGHTS OF SETOFF OR ANY RIGHTS UNDER ANY PERFORMANCE ASSURANCE, OR TO PROHIBIT ANY ACTION TO ENFORCE ANY REMEDY PROVIDED UNDER THIS AGREEMENT.

#### ARTICLE 17 CONFIDENTIALITY

17.1 Confidential Information. The term "Confidential Information" as used in this Agreement means:

(a) information provided by or on behalf of one Party (the "Disclosing Party") to the other Party (the "Receiving Party") or its Representatives in connection with this Agreement, whether transmitted or disclosed to the Receiving Party or its Representatives in person, electronically, by telephone or facsimile transmission, in writing, by drawings, orally, or in any other manner or form, that is clearly labeled or designated by the Disclosing Party as "confidential" or "proprietary" or, if disclosed orally, clearly identified as confidential with that status confirmed promptly thereafter in writing, identifying the substance and content of such information;

(b) any notes, analysis, compilations, studies, interpretations, memoranda, or other documents and writings prepared by the Receiving Party or its Representatives that contain, reflect, or are based upon, in whole or in part, any information described in clause (a) above and marked as "confidential" or "proprietary";

*provided, however*, that Confidential Information will not include:

(i) information already lawfully in the Receiving Party's possession at the time of its receipt from the Disclosing Party;

(ii) information that is lawfully obtained by the Receiving Party from a third party subsequent to its receipt from the Disclosing Party, if the third party is free from any obligation of confidentiality to the Disclosing Party or its Affiliates with respect to such information;

(iii) information that (A) at the time of disclosure by the Disclosing Party to the Receiving Party, is available to the public, or (B) after disclosure by the Disclosing Party to the Receiving Party, becomes available to the public, except where such availability arises out of the breach of this Agreement by the Receiving Party;

(iv) information independently developed by the Receiving Party without violating its obligations under this Agreement; and

(v) information that the Disclosing Party, in writing, specifically authorizes the Receiving Party to disclose prior to such disclosure.

17.2 Disclosure and Use of Confidential Information. The Receiving Party:

(a) will hold in strict confidence all Confidential Information and, without the prior written consent of the Disclosing Party, will not disclose any Confidential Information to any Person (other than the Receiving Party's Representatives), using at a minimum the same degree of care to avoid disclosure of such Confidential Information as the Receiving Party uses with respect to its own confidential information, but in any event not less than a reasonable degree of care;

(b) will use the Confidential Information solely in connection with this Agreement; and

(c) will not disclose any Confidential Information to the Receiving Party's Representatives unless such individuals have a need to know such Confidential Information for a purpose specifically allowed under this Agreement, and have been informed of this Agreement and the terms hereof, *provided* that the Receiving Party will be liable for any breach of the confidentiality provisions of this Agreement by its Affiliates or Representatives.

17.3 Required Disclosure. The confidentiality requirements of this Agreement will not apply to Confidential Information to the extent that the Receiving Party is required to disclose such Confidential Information pursuant to applicable Law or legal process, including the South Carolina Freedom of Information Act. If the Receiving Party is compelled by any such Law or legal process to disclose any Confidential Information, the Receiving Party, to the extent not prohibited by applicable Law, will provide the Disclosing Party with prompt notice of such requirement, and will reasonably cooperate with the Disclosing Party in obtaining appropriate protective order(s) for such compelled disclosure (in each case at the Disclosing Party's expense). If the Receiving Party is ordered or instructed to disclose Confidential Information by a court of competent jurisdiction or, in the professional judgment of the Receiving Party's counsel, the Receiving Party is compelled to permit such disclosure or else risk civil or criminal liability, or if the Disclosing Party waives compliance with the confidentiality provisions of this



Agreement, then the Receiving Party may so disclose such Confidential Information or other information without liability hereunder, *provided* that to the extent not prohibited by applicable law, the Receiving Party has given the Disclosing Party a reasonable opportunity under the circumstances to review the text of such disclosure before it is made.

17.4 Specific Performance; Injunctive Relief. The Receiving Party acknowledges and agrees that, because of the sensitive and confidential nature of the Confidential Information, the breach by the Receiving Party of the terms of this Agreement with regard to disclosure of Confidential Information may cause the Disclosing Party irreparable harm and damage and that a monetary remedy for any such breach will be inadequate and will be impracticable and extremely difficult to prove. Therefore, the Receiving Party agrees that, in the event of such breach, the Disclosing Party will have the right to exercise all remedies available at law and equity, including specific performance and temporary and permanent injunctive relief, including temporary restraining orders, preliminary injunctions and permanent injunctions, without the necessity of posting a bond or making any undertaking in connection therewith and without the necessity of proving actual damages. Any such requirement of a bond or undertaking is hereby waived by the Receiving Party, and the Receiving Party acknowledges that in the absence of such a waiver, a bond or undertaking might be required by the court. The Receiving Party hereby submits to the subject matter jurisdiction of any South Carolina court granting such relief.

17.5 Survival of Obligations. The confidentiality obligations of the Receiving Party under this Agreement will remain in full force and effect for a period of 2 years from the date of termination of this Agreement, except for obligations related to trade secrets of a Party, which obligation shall extend indefinitely.

17.6 Public Announcements. Neither Party may issue or make any public announcement, press release or statement regarding this Agreement unless the public announcement, press release or statement is issued jointly by the Parties or, before the release of the public announcement, press release or statement, the Party furnishes the other Party with a copy of such announcement, press release or statement, and obtains the approval of the other Party, such approval not to be unreasonably withheld, conditioned or delayed. However, no Party will be prohibited from issuing or making any such public announcement, press release or statement, without obtaining approval from the other Party, if it is necessary to do so to comply with applicable Laws, legal proceedings or rules and regulations of any stock exchange having jurisdiction over such Party or if it is necessary to do so in connection with such Party or its Affiliates' financial statements

## ARTICLE 18 MISCELLANEOUS

### 18.1 Assignment.

(a) Except as provided in Section 18.1(b) below, any sale, transfer, or assignment of this Agreement or any interest in the Facility or the Host will be null and void and a breach of this Agreement without the prior written consent of the other Party, which consent will not be unreasonably withheld, conditioned or delayed so long as (i) the assignee expressly assumes the transferring Party's payment and performance

obligations under this Agreement, and (ii) the transferring Party delivers evidence satisfactory to the non-transferring Party of the proposed assignee's technical and financial capability to fulfill the assigning Party's obligations hereunder.

(b) Either Party may sell, transfer or assign this Agreement or its interests in the Facility on notice to the other Party but without the other Party's consent if such sale, transfer or assignment is in connection with a Permitted Transaction *provided* that, in the event the Permitted Transaction involves a transfer by Buyer to an Affiliate, Buyer remains secondarily responsible for fulfilling such Affiliate's obligations hereunder unless Buyer demonstrates to Seller's reasonable satisfaction that the Affiliate has the financial capability to fulfill Buyer's obligations hereunder.

(c) This Agreement will be binding on and inure to the benefit of the Parties and their permitted successors and assigns.

#### 18.2 Relationship of the Parties.

(a) Seller is an independent contractor and nothing contained herein will be construed as constituting any relationship with Buyer other than that of purchaser and independent contractor, nor will it be construed as creating any relationship whatsoever between the Parties, including employer/employee, partners or joint venture parties.

(b) Each Party is acting for its own account, and it has made its own independent decisions to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment and upon advice from such advisers as it has deemed necessary. It is not relying on any communication (written or oral) of the other Party as investment advice or as a recommendation to enter into this Agreement; it being understood that information and explanations related to the terms and conditions of this Agreement will not be considered investment advice or a recommendation to enter into this Agreement. No communication (written or oral) received from the other Party will be deemed to be an assurance or guarantee as to the expected results of this Agreement except as otherwise expressly set forth herein.

(c) Each Party is capable of assessing the merits of and understanding (on its own behalf or through independent professional advice), and understands and accepts, the terms, conditions and risks of this Agreement. It is also capable of assuming, and assumes, the risks of this Agreement.

(d) Neither Party is acting as a fiduciary for or an adviser to the other Party in respect of this Agreement.

(e) Each Party is entering into this Agreement and any other documentation relating to this Agreement as principal (and not as agent or in any other capacity, fiduciary to otherwise).

18.3 Notices. All notices, requests, statements or payments will be made to the addresses and persons specified in Exhibit F. All notices, requests, statements or payments will be made in writing except where this Agreement expressly provides that notice may be made



orally. Notices required to be in writing will be delivered by hand delivery, overnight delivery, facsimile, or e-mail (so long as a copy of such e-mail notice is provided immediately thereafter by hand delivery, overnight delivery, or facsimile). Notice by facsimile will (where confirmation of successful transmission is received) be deemed to have been received on the day on which it was transmitted (unless transmitted after 5:00 p.m. at the place of receipt or on a day that is not a Local Business Day, in which case it will be deemed received on the next Local Business Day). Notice by hand delivery or overnight delivery will be deemed to have been received when delivered. Notice by e-mail will be deemed to have been received when such e-mail is transmitted, so long as a copy of such e-mail notice is delivered immediately thereafter by hand delivery, overnight delivery, or facsimile; *provided* that no such copy of e-mail notices will be required for notifications sent in the ordinary course of business by e-mail and notifications of changes in availability of the Facility sent by e-mail. When notice is permitted to be provided orally, notice by telephone will be permitted and will be deemed to have been received at the time the call is received. A Party may change its address by providing notice of the same in accordance with the provisions of this Section 18.3.

#### 18.4 Resolution of Disputes.

(a) If any dispute (including payment dispute), controversy or claim arising out of or relating to this Agreement or the breach, termination or validity thereof should arise between the Parties (a "Dispute"), the Party wishing to declare a Dispute will deliver to the other Party a written notice identifying the disputed issue.

(b) Following delivery and receipt of a notice of Dispute, executives of both Parties will meet at a mutually acceptable time and place within 10 Business Days after receipt of such notice and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the Dispute; *provided, however*, in the event of a threatened, actual or claimed breach of the confidentiality provisions of this Agreement, the Disclosing Party may bypass the provisions of this Dispute discussion provision and immediately seek relief in a court of competent jurisdiction to stay any threatened or continued breach of this Agreement. In such meetings and exchanges, a Party will have the right to designate as confidential any information that such Party offers. If the matter has not been resolved in the aforementioned manner within 30 days after delivery of the notice of the Dispute by a Party, or if the Parties fail to meet within 10 Business Days as required above, either Party may initiate any legal action, suit or other proceeding available to it to resolve such Dispute.

#### 18.5 Governing Law; Venue; Waiver of Jury Trial.

(a) This Agreement and the rights and duties of the Parties hereunder will be governed by and construed, enforced and performed in accordance with the laws of the State of South Carolina, without regard to principles of conflicts of law that would result in the application of the law of any other state.

(b) EACH PARTY IRREVOCABLY AND UNCONDITIONALLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE GENERAL COURTS OF JUSTICE OF THE STATE OF SOUTH CAROLINA AND TO THE EXCLUSIVE

JURISDICTION OF THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH CAROLINA, AND ANY APPELLATE COURTS FROM ANY SUCH COURT, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE SUBJECT MATTER HEREOF OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND EACH OF THE PARTIES IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING SHALL BE HEARD AND DETERMINED IN SUCH COURTS. EACH OF THE PARTIES AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES, AND AGREES NOT TO ASSERT, BY WAY OF MOTION, AS A DEFENSE, OR OTHERWISE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE (I) THAT IT IS NOT SUBJECT PERSONALLY TO THE JURISDICTION OF THE ABOVE-NAMED COURTS, THAT THE SUIT, ACTION OR PROCEEDING IS BROUGHT IN AN INCONVENIENT FORUM, THAT THE VENUE OF THE SUIT, ACTION OR PROCEEDING IS IMPROPER OR THAT THIS AGREEMENT OR THE SUBJECT MATTER HEREOF MAY NOT BE ENFORCED IN OR BY SUCH COURT AND (II) TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT IN ANY COURT REFERRED TO ABOVE. EACH OF THE PARTIES HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

18.6 Entire Agreement. This Agreement, including the Exhibits attached hereto and incorporated herein, together with the Ground Lease, contain the entire understanding of the Parties with respect to the subject matter hereof and thereof and supersede all prior and contemporaneous discussions, agreements and commitments between the Parties with respect hereto and thereto, and any prior and contemporaneous confidentiality agreements executed by the Parties in respect of the transactions contemplated by this Agreement. There are no agreements or understandings between the Parties respecting the subject matter hereof or thereof, whether oral or written, other than those set forth herein or therein, and neither Party has relied upon any representation, express or implied, not contained in this Agreement.

18.7 Amendments. This Agreement may be modified or amended only by an instrument in writing signed by the Parties hereto.

18.8 Severability. If any of the terms and conditions of this Agreement is held by any court of competent jurisdiction to contravene, or to be invalid under, the laws of any Governmental Authority having jurisdiction over the subject matter of this Agreement, such contravention or invalidity will not invalidate the entire Agreement. Instead, this Agreement will be construed as if it did not contain the particular provision or provisions held to be invalid, and an equitable adjustment will be made and necessary provisions added so as to give effect to the



intention of the Parties as expressed in this Agreement at the time of the execution of this Agreement and of any amendments to this Agreement.

18.9 Record Retention; Audit. Each Party agrees to retain all records relating to the performance of such Party's obligations hereunder for a period of 5 years from and after the creation of such records, and to cause its Affiliates to retain all such records for the same period. Either Party will have the right during such period, on an annual basis and upon reasonable prior notice, to audit the other Party's metering and other records relating to this Agreement to the limited extent necessary to verify the basis for any claim by either Party regarding payments hereunder. Each Party will make such metering and other records available at its corporate office during normal business hours and the auditing Party will reimburse the other Party for those reasonable out of pocket costs incurred by it in respect of such audit, as supported by appropriate documentation.

18.10 No Third Party Beneficiaries. This Agreement is for the sole benefit of the Parties hereto, and except as specifically provided herein, nothing in this Agreement or any action taken hereunder will be construed to create any duty, liability or standard of care to any Person not a party to this Agreement. Except as specifically provided herein, no Person not a Party hereto will have any rights or interest, direct or indirect, in this Agreement or the services to be provided hereunder, or both. The Parties specifically disclaim any intent to create any rights in any Person as a third-party beneficiary to this Agreement or the services to be provided hereunder, or both.

18.11 No Recourse. This Agreement is solely and exclusively between Buyer and Seller, and any obligations created herein will be the sole obligations of the Parties hereto. No Party will have recourse to any director, officer, Affiliate, partner, or joint venturer of the other Party for performance of said obligations, unless the obligations are assumed or guaranteed in writing by the Person against which recourse is sought.

18.12 Non-Waiver. No waiver of any of the terms of conditions of this Agreement will be effective unless in writing and signed by the Party against whom such waiver is sought to be enforced. Any waiver of the terms hereof will be effective only in the specific instance and for the specific purpose given. The failure of a Party to insist, in any instance, on the strict performance of any of the terms and conditions hereof will not be construed as a waiver of such Party's right in the future to insist on such strict performance.

18.13 Forward Contract; Forward Agreement. The Parties acknowledge and intend that this Agreement, the transactions contemplated hereby, and any instruments that may be provided by either Party hereunder will each, and together, constitute one and the same "forward contract" and "forward agreement" within the meaning of the Bankruptcy Code, and that Buyer and Seller are "forward contract merchants" and "swap participants" within the meaning of the Bankruptcy Code. Each Party agrees that it will not make any assertion or claim, in any Dispute or otherwise, or otherwise take any position to the effect that this Agreement, the transactions contemplated hereby, and any instrument(s) that may be provided by either Party hereunder do not each, and together, constitute one and the same "forward contract" and "forward agreement" within the meaning of the Bankruptcy Code, or that Buyer and Seller are not "forward contract merchants" and "swap participants" within the meaning of the Bankruptcy Code.

18.14 Expenses. Each Party will be responsible for its own costs and expenses (including the fees and expenses of its legal counsel) incurred in the preparation, review, execution and delivery of this Agreement and all related documents.

18.15 Headings. The headings to Articles, Sections and Exhibits of this Agreement are for ease of reference only and in no way define, describe, extend or limit the scope of intent of this Agreement or the intent of any provision contained herein.

18.16 Further Assurances. Each Party agrees to provide such information, execute and deliver any instruments and documents and to take such other actions as may be necessary or reasonably requested by the other Party which are not inconsistent with the provisions of this Agreement and which do not involve the assumptions of obligations other than those provided for in this Agreement, in order to give full effect to this Agreement and to carry out the intent of this Agreement.

18.17 Counterparts; Execution by Facsimile or Electronic Mail. This Agreement may be executed in one or more counterparts, all of which will be considered one and the same Agreement and each of which will be deemed an original. Delivery of an executed counterpart of this Agreement by facsimile or by electronic transmission will be equally effective as delivery of an original executed counterpart of this Agreement.

*[SIGNATURE PAGE FOLLOWS]*

IN WITNESS WHEREOF, Seller and Buyer have entered into this Agreement effective as of the Effective Date.

**SELLER**

**DUKE ENERGY CAROLINAS, LLC**

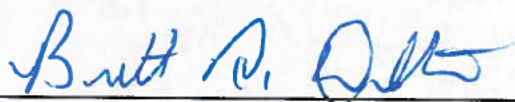
By: 

Name: ROBERT F. CARDWELL

Title: PRESIDENT DE REP.

**BUYER**

**CLEMSON UNIVERSITY**

By: 

Name: Brett A. Dalton

Title: Executive Vice President of Finance & Operations



**EXHIBIT A**  
**SPECIFICATIONS**

**Steam**

DE will provide saturated steam at a nominal pressure of 325 psig and at a maximum pressure of 350 psig. The steam purity and quality will meet the specifications of CU's existing boilers and water treatment system.

DE will provide steam flow to furnish a variable CU campus steam flow rate ranging from a minimum of 20,000 lb/hr to a maximum turbine exhaust and duct burner steam output of 100,000 lb/hr to supplement CU's full peak steam requirement. The level of fresh air firing capability is 60,000 lb/hr to provide base load steam to supplement CU's other boilers when the Combustion Turbine Generator (CTG) is down.

**Condensate**

CU will provide condensate at nominal conditions of 120°F and 10 psig. CU plans to return 70% of the condensate but does not guarantee an amount. Condensate will be sufficiently free of impurities consistent with electric and steam generation utility practices. DE may reject condensate if it fails DE's minimum quality standards.

**Make-Up Water**

CU will provide all CHP make-up water from Buyer's municipal water system at nominal conditions of 75°F and 60 psig.

**DE Facilities**

- Building and Related Infrastructure.
- CHP Plant and Related Equipment (~16 MW GT + HRSG + Duct-Firing)
- Interconnection Facilities
  - Power connection to DE grid

**CU Facilities**

- Steam
- Condensate
- Make-up water
- Potable water

- Sewer connection

# **EXHIBIT B** **SITE PLAN**

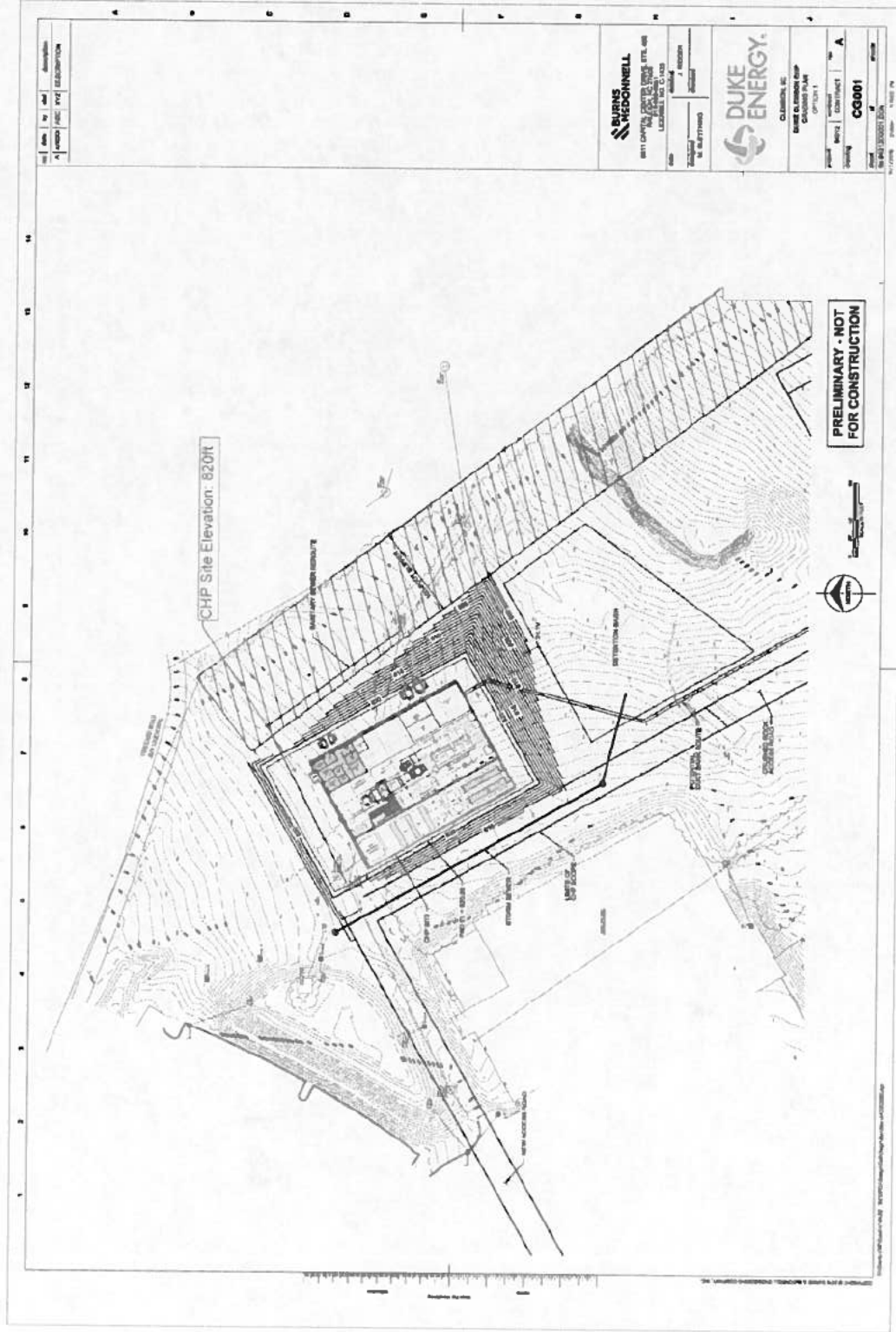


Exhibit B-1



**EXHIBIT C****PAYMENT CALCULATIONS****Contract Price Formula**

The price per thousand pounds of steam is the product of the natural gas price times a multiplier.

The natural gas price for each 12-month period from July 1 through June 30 (or portion thereof) during the Term will be the average of the monthly NYMEX Henry Hub (HH) contract closing prices for each month during such 12-month period, as determined on the basis of the contract closing price for each such month on the last trading day of June immediately preceding the commencement of such 12-month period. For example, the last trading day in June 2016 for the July 2016 and subsequent 11 months' NYMEX HH contracts is June 28, 2016. The natural gas price for the 12-month period from July 1, 2016 through June 30, 2017 would be the average of the contract closing prices for the monthly NYMEX HH contracts from July 2016 through June 2017, as determined on the basis of the contract closing prices on June 28, 2016.

The multiplier depends on the volume of steam delivered by DE to CU per the table below. CU will pay for at least 350,000 k#/year regardless of the actual amount it takes as long as the CHP is able to deliver this amount.

Steam k#/year		Multiplier
At Least...	But Less Than...	
350,000	400,000	2.100
400,000	450,000	1.850
450,000	482,000	1.675
482,000	530,000	1.550
530,000	n/a	1.425

For example, if the NYMEX HH 12 month strip on June 28, 2016 is \$2.50/mmBtu and CU nominates to take 500,000 k# steam for the year, then CU will pay DE \$1,937,500 ( $\$2.50 \times 1.550 \times 500,000$ ) in 12 equal monthly payments of \$161,458. Full year payment will be trued up for the actual amount of steam.

If the NYMEX HH 12 month strip exceeds \$8, DE and CU will renegotiate the Contract Price to a value that is advantageous for CU and the rest of the DE's customers if approved by the SC Public Utilities Commission.

From time to time, the Parties may agree to using a longer NYMEX HH time period such as 2-5 years for determining the natural gas price. For example, if the Parties agree to a NYMEX HH 3 year strip, then the steam price for the relevant 3-contract-year period would be fixed at that amount for all 3 years.

**EXHIBIT D****TERMINATION PAYMENT AMOUNTS****Termination Payment Payable under Section 14.5:**

Two times the total Contract Price (as determined in accordance with Exhibit C) for the most recently ended Contract Year.

**Termination Payment Payable under Section 15.1:**

Contract Years 1-10: No termination for convenience by either Party.

Contract Years 11 and later: Two times the total Contract Price (as determined in accordance with Exhibit C) for the most recently ended Contract Year.

**EXHIBIT E****REQUIRED PERMITS AND APPROVALS**

Task Name	Regulatory Agency	Status
Jurisdictional Determination	USACE	Only necessary if the project has the potential to impact waters of the US.
Dredge/fill permit (CWA Section 404)	USACE	Required only if the project has justifiable and unavoidable impacts to waters of the US.
Water Quality Certification (CWA Section 401)	SC DHEC	Required only if Section 404 permit is necessary.
NPDES permit (CWA Section 402)	SC DHEC	NPDES Construction General Permit may be required even for ground disturbance > 1 acre. EPC contractor to obtain including NOI and SWPPP, as needed.
Endangered Species Act	USFWS	EPC consultant to obtain concurrence letter.
National Historic Preservation Act, Section 106	SC SHPO / THPO	EPC consultant to obtain concurrence letter.
Air Emissions, Construction Permit (CAA)	SC DHEC	Duke Energy to obtain prior to construction. PSD permit is not anticipated.
Air Emissions, Operating Permit (CAA)	SC DHEC	Duke Energy to obtain and hold air operating permit.
SPCC Plan (CWA, OPA)	EPA	EPC Contractor to complete once selected.
FAA Determination	FAA	Not anticipated. Re-evaluate upon final design
Potable Water	SC DHEC	Drinking water connections to be supplied by Clemson University.
Sewage Disposal	SC DHEC	Wastewater disposal to the City of Clemson. Will require General Permit for Satellite Sewer System.
Erosion and Sedimentation Control Plan	SC DHEC	EPC Contractor to obtain permit.

USACE = U.S. Army Corps of Engineers; CWA = Clean Water Act; SC DHEC = S.C. Department of Health and Environmental Control; USFWS = U.S. Fish & Wildlife Service; SHPO/THPO = State Historic Preservation Officer / Tribal Historic Preservation Officer; EPA = Environmental Protection Agency; NPDES = National Pollutant Discharge Elimination System; NOI = Notice of Intent; PSD = Prevention of Significant Deterioration; SWPPP = Storm Water Pollution Prevention Plan; EPC = Engineering, Procurement, Construction; SPCC = Spill Prevention, Control and Countermeasures; OPA = Oil Pollution Act; FAA = Federal Aviation Administration



**EXHIBIT F****NOTICES ADDRESSES**

Seller: Duke Energy Carolinas, LLC

Buyer: Clemson University

**All Notices:**

**All Notices:**

Street: 400 South Tryon Street

Street: 310 Klugh Avenue

City: Charlotte, NC 28202

City: Clemson, SC 29634

Attn: Director, Business Development

Attn: Director of Utility Services

Phone: 704-382-9644

Phone: 864-656-7300

Facsimile: 704-382-4207

Facsimile: 864-656-0793

E-mail: zachary.kuznar@duke-energy.com

E-mail: Tony@clemson.edu

GROUND LEASE AND EASEMENT AGREEMENT  
(CHP Facility)

This **GROUND LEASE AND EASEMENT AGREEMENT** (this "Ground Lease"), is dated as of February 2, 2017 ("Effective Date") between **Clemson University**, a body politic under the laws of the State of South Carolina ("Landlord") and **DUKE ENERGY CAROLINAS, LLC**, a North Carolina limited liability company ("Tenant").

In consideration of the mutual agreements herein contained and other good and valuable consideration, the receipt and legal sufficiency of which is hereby acknowledged, the parties hereto, intending to be legally bound hereby, hereby agree as follows:

1. Definitions. For all purposes of this Ground Lease the terms set forth in Exhibit B shall have the meanings assigned to them in said Exhibit B, and include the plural as well as the singular.

2. Lease; Terms.

2.1 Lease of Site; Terms. Landlord hereby leases the Site to Tenant, and Tenant hereby leases the Site from Landlord, upon the terms and conditions hereof, for the Development Period, and, if applicable, the Operational Term, as described below in Sections 2.1.1 and 2.1.2.

2.1.1 The Development Period (the period during which Tenant performs development activities, including but not limited to, obtaining permits, securing its position to interconnect into the grid and constructing the Facility), shall commence on the Effective Date and continue until the Target Commercial Operation Date (as defined in the SSPA). If Tenant notifies Landlord at least thirty (30) days prior to the expiration of the Development Period that Tenant has commenced construction of the Facility, then the Development Period shall not expire on its scheduled expiration date but shall be automatically extended until the occurrence of the Commercial Operation Date with respect to Facility. Tenant shall have "commenced construction" of the Facility if and when Tenant commences the grading on the Site, and is diligently pursuing construction of the Facility on the Property. The Development Period respecting the Facility shall, in all events, terminate on the Commercial Operation Date of the Facility and the Operational Term for the Facility shall commence.

2.1.2 The Operational Term (the period during which the Facility is generating and delivering Steam (as such term(s) is/are defined in the SSPA) as well as generating electricity), if it occurs, shall commence on the Commercial Operation Date for the Facility or such earlier date as designated by Tenant in writing, and continue to the date that is thirty-five (35) years following such commencement date or such earlier termination date as the parties hereto may mutually agree upon in the event of a termination of the SSPA. The Development Period and the Operational Term are herein sometimes collectively referred to as the "Term".

2.2 Force Majeure. Tenant shall have the right to terminate this Ground Lease as follows:

2.2.1 To the extent Tenant is prevented by Force Majeure Event from operating the Facility located on the Site for the purposes of generating or selling Steam to the Landlord pursuant to the SSPA, and Tenant gives notice and details of the Force Majeure Event to the Landlord as soon as practicable, then the Tenant will be excused from the performance of its obligations under this Ground Lease (other than the obligation to make payments then due or becoming due with respect to performance prior to the Force Majeure Event). The Tenant will give prompt notice to the Landlord of the Force Majeure Event and the extent of the Tenant's inability to operate the Facility and fulfill its obligations under this Ground Lease and/or the SSPA. If the Tenant provides such notice orally, the Tenant will promptly follow such oral notice with written notice provided in accordance with the requirements of this Ground Lease. The Tenant will use commercially reasonable efforts to (a) remove or remedy such inability to perform within a reasonable period of time, and (b) mitigate the impacts on the Landlord of such inability to perform. The Landlord will not be required to perform or resume performance of its obligations to the Tenant corresponding to the obligations of the Tenant excused by Force Majeure Event.



2.2.2 The Tenant will (a) promptly notify the Landlord upon the occurrence of any Force Majeure Event, which notice will indicate the scope and cause of the Force Majeure Event and the anticipated period of impact of such Force Majeure Event, (b) promptly provide such available information about the Force Majeure Event and its impact as may be reasonably requested by the Landlord and (c) provide updated information regarding such Force Majeure Event and its impact from time to time as reasonably requested or periodically (but not less than once per month) until such Force Majeure Event and its impact on the obligations of the Tenant under the terms of this Agreement and/or the SSPA cease to exist. When the Tenant is able to resume performance of its obligations under this Ground Lease and under the SSPA, it will give the Landlord written notice and the Landlord and Tenant will resume performance under the Ground Lease. Subject to Section 2.2.4 below, if any Force Majeure Event excuses performance of the Tenant's obligations under this Ground Lease or the SSPA for a period in excess of 30 days, the Term will be extended for a period equal to the period of such excused performance. The Parties will amend this Agreement in writing to reflect any such extension of the Term.

2.2.3 The suspension of performance by the Tenant due to a Force Majeure Event will be of no greater scope and no longer duration than that which is necessary. Tenant will use its commercially reasonable efforts to cure the cause(s) preventing its performance under the terms of this Ground Lease and the SSPA. When the Tenant is able to resume performance of its obligations under this Ground Lease and under the SSPA, it will immediately give the Landlord written notice to that effect and will resume such performance under this Ground Lease and the SSPA as soon as practicable after such notice is delivered. The settlement of strikes, lockouts and other labor disputes will be entirely within the discretion of the Tenant and Tenant will not be required to settle such strikes, lockouts or other labor disputes by acceding to demands which Tenant deems to be unreasonable in its sole and absolute discretion.

2.2.4 If a Force Majeure Event prevents the Tenant from performing a material obligation of Tenant under either this Ground Lease or the SSPA for a period of 12 consecutive months, then the Tenant will have the right to terminate this Ground Lease by written notice to the Landlord, in which case this Ground Lease will terminate 90 days after the date of such termination notice unless, within such 90-day period, (a) full performance has resumed hereunder or the Tenant has withdrawn such notice or (b) the Tenant demonstrates, to the reasonable satisfaction of the Landlord, that the Tenant is exercising sustained and diligent efforts to overcome the effects of the Force Majeure Event and reasonably expects that the Tenant will be able, within a period of six (6) months from the end of such 90-day period, to resume performance of the obligations affected by the Force Majeure Event. Upon the effective date of such termination, neither Party will have any further rights or obligations under this Ground Lease, except those rights and obligations arising before the effective date of such termination and except as expressly provided otherwise in this Ground Lease, and Tenant shall surrender the Site and any applicable Easement Areas pursuant to Article 6 hereof. Further, Tenant will not be liable to the Landlord for any termination payment or otherwise owe to the Landlord any damages of any kind for or as a result of such termination; *provided, however*, that such termination will not relieve either Party of any obligations or any liability arising under or in connection with this Ground Lease prior to such termination, or Tenant's obligation to surrender the Site and any applicable Easement Areas to Landlord pursuant to Article 6 hereof.

2.3 Holdover. If Tenant shall remain in possession of the Site after the expiration or termination of the Term, such possession shall be on a month-to-month tenancy, and the provisions of this Ground Lease shall remain applicable for any such term; provided that, such possession shall be subject to termination by Landlord at any time on not less than 30 days prior written notice. If Tenant fails to surrender the Site upon the expiration or termination of the Term pursuant to Section 6 hereof, in addition to any other liabilities to Landlord accruing therefrom, Tenant shall indemnify and hold Landlord harmless from any loss or liability resulting from such failure.

3. Severance. The parties agree that all improvements at any time constructed by or for Tenant on the Site or within any Easement Area, whether prior to the Effective Date or after same, and all equipment at any time acquired by or for Tenant and located on the Site or within any Easement Area, including (without limitation) all improvements and equipment comprising the Facility, are hereby severed by agreement and intention of the parties and shall remain severed from the Site and any Easement Area, shall be considered with respect to the interests of the parties hereto as the sole and exclusive property of Tenant or a Financing Party designated by Tenant, and, even though attached to or affixed to or installed upon the Site or within an Easement Area, shall not be considered to be fixtures or a part of the Site or such Easement Area and shall not be or become subject to the lien of any mortgage or deed of trust heretofore or hereafter placed on the Site or any Easement Area by Landlord.



Landlord hereby waives any rights it may have under the laws of the State of South Carolina arising under this Ground Lease or otherwise to any lien upon, or any right to distress or attachment upon, or any other interest in, any item constituting all or any portion(s) of the Facility or any other equipment or improvements constructed or acquired by or for Tenant and located on the Site or within any Easement Area.

4. Rent. Rent for the entire Term (both the Development Period and the Operational Term and any extension(s) thereof) of this Ground Lease shall consist of the payment in the amount of One Hundred and No/100 Dollars (\$100.00), the receipt and sufficiency of which Landlord hereby acknowledges. Provided, however, in the event of early termination of the SSPA, and if the Landlord and Tenant mutually agree that the Facility is to remain in place after such termination, the Rent shall be modified to be the Fair Market Rental Rate as determined below:

4.1 Definition. The term "Fair Market Rental Rate" shall mean the market rental rate for the time period such determination is being made for land in the Clemson area (the "AREA") of comparable condition and of equivalent quality, size, utility, and location. Such determination shall take into account all relevant factors, including, without limitation, the following matters: the credit standing of Tenant; the length of the term (but specifically excluding the value of improvements installed in the Premises at Tenant's cost).

4.2 Determination. Landlord shall deliver to Tenant notice of the Fair Market Rental Rate (the "FMR Notice") for the Premises for the remaining applicable Operational Term in question within ten (10) days after the termination of the SSPA giving rise for the need to determine the Fair Market Rental Rate. If Tenant disagrees with Landlord's assessment of the Fair Market Rental Rate specified in a FMR Notice, then it shall so notify Landlord in writing within ten (10) business days after delivery of such FMR Notice; otherwise, the rate set forth in such notice shall be the Fair Market Rental Rate. If Tenant timely delivers to Landlord notice that Tenant disagrees with Landlord's assessment of the Fair Market Rental Rate, then Landlord and Tenant shall meet to attempt to determine the Fair Market Rental Rate. If Tenant and Landlord are unable to agree on such Fair Market Rental Rate within ten (10) business days after Tenant notifies Landlord of Tenant's disagreement with Landlord's assessment thereof, then Landlord and Tenant shall each appoint an independent real estate appraiser with an MAI designation and with at least ten (10) years' commercial real estate appraisal experience in the AREA market. The two appraisers shall then, within ten (10) days after their designation, select an independent third appraiser with like qualifications. Within twenty (20) business days after the selection of the third appraiser, a majority of the appraisers shall determine the Fair Market Rental Rate. If a majority of the appraisers is unable to agree upon the Fair Market Rental Rate by such time, then the two (2) closest appraisals shall be averaged and the average will be the Fair Market Rental Rate. Tenant and Landlord shall each bear the entire cost of the appraiser selected by it and shall share equally the cost of the third appraiser.

4.3 Annually thereafter, the Fair Market Rental Rate payable by Tenant hereunder shall be increased in an amount equal to the product of the Fair Market Rental Rate times a number equal to the percentage increase in the CPI over a 12 month period, calculated by using the most recently published CPI and the CPI published 12 months earlier. As used herein, "CPI" shall mean Consumer Price Index for All Urban Consumers for the metropolitan area in which the property (Premises) is located or to which it is closest in proximity, published by the Bureau of Labor Statistics, United States Department of Labor.

5. Further Assurances. Landlord and Tenant each agree to execute and deliver all further instruments and documents and take any further action that may be reasonably necessary to effectuate the purposes and intent of this Ground Lease regarding the Facility. To such end, Landlord shall grant to Tenant and Tenant's Parties, or to such entity as Tenant may reasonably request, at no additional consideration, temporary, nonexclusive easements and rights-of-way in, to, over, under and across the Site and, as applicable, within the Building(s), and/or adjacent lands owned or controlled by Landlord, and any improvements thereon, as Landlord and Tenant deem reasonably necessary or desirable in connection with the development, construction, ownership, operation, maintenance and expansion of the Facility (the "Operational Easements") as well as an easement for purposes of interconnection with Tenant's main distribution system (the "Electrical Interconnection Easement") (the Operational Easements and the Electrical Interconnection Easement herein collectively referred to as the "Easements", each also herein sometimes referred to as an "Easement" and the area(s) burdened thereby, the "Easement Areas"). All Easements associated with the operation of the Facilities shall automatically terminate as of the date the Term terminates or expires, inclusive of any recognized and permitted holdover period. Upon request by Tenant, Landlord will execute one or



more easement agreements reflecting the Operational Easements and the Electrical Interconnection Easement, which easement agreements shall be recorded in the Official Records at Tenant's expense. Landlord shall not grant or convey any easement or other interest that, if used or enjoyed in accordance with its terms: (i) would materially interfere with Tenant's operation, use and enjoyment of the Facility, the Site, and/or the Easements, Tenant's performance under the terms of the SSPA, or Tenant's production of electricity at the Site, (ii) would materially interfere with Landlord's operation, use and enjoyment of Landlord's Property, or (iii) would materially adversely affect Landlord's title to the Site, the reversionary interest therein, or Landlord's interest under the Ground Lease. If there are any mortgages, deeds of trust or other security interests or the like encumbering the Site (or any portion(s) thereof) or any Easement Area which would have priority over this Ground Lease, within 30 days after Tenant's written request, Landlord shall obtain a commercially reasonable subordination, non-disturbance and attornment agreement, in a form satisfactory to Tenant, from any lender or beneficiary which provides, among other things, that Tenant's occupancy or use of the Site and the Easements in accordance with the terms of this Ground Lease and any applicable Easement(s) will not be disturbed. Landlord reserves to itself, its successors and assigns, together with the right to grant and transfer all or a portion of the same, the following (collectively, "Landlord Easements"): nonexclusive easements for ingress and egress and for the installation, placement, maintenance and replacement of electric, gas, telephone, cable television, water and sanitary sewer lines, drainage facilities or any other utilities (collectively, "Landlord Utilities"), and of landscaping on, over, under or across those portions of the Site not improved with the Facility or other major structures existing from time to time pursuant to the terms and conditions of this Ground Lease, together with the right, at reasonable times, to enter upon the Site in order to service, maintain, repair, reconstruct, relocate or replace any of such Landlord Utilities or landscaping. In using the rights reserved hereunder, Landlord agrees that such use shall be at times and in a manner that will reasonably cause the least amount of disruption to the operations on the Site.

6. Surrender of Site. Upon expiration of the Term or earlier termination of this Ground Lease with respect to the Facility for any reason, Tenant shall surrender to Landlord the Site and any applicable Easements related to the Site, as provided in this Article 6. In accordance with and subject to the terms of Section 3 above, within 60 days after the termination or expiration of the Term, Tenant shall commence to decommission, dismantle and remove the Facility and all other property of Tenant located on the Site and the applicable Easement Areas, returning same to their condition as of the Effective Date to the extent reasonably practical, and shall complete such decommissioning, dismantling and removal within 270 days of commencement of the work, or such other period of time as may be agreed to by Landlord. Landlord hereby grants to Tenant and Tenant's Parties a license to enter upon the Site and the Easement Areas to perform the activities required to be performed by Tenant pursuant to this Article 6, which license shall be effective commencing upon the date of termination or expiration of the Term and shall terminate upon the date on which such decommissioning, dismantling and removal activities are complete.

7. Nontermination. Except as specifically provided to the contrary in this Ground Lease or any instruments creating the Easements, this Ground Lease shall not terminate, nor shall Tenant's interest in the Site, the Easements, or the Facility be extinguished, lost, conveyed or otherwise impaired, or be merged into or with any other interest or estate in the Site, the Easement Areas or any other property interest, in whole or in part, by any cause or for any reason whatsoever.

8. Possession and Quiet Enjoyment. As long as no Tenant Event of Default under this Ground Lease has occurred and is continuing beyond any applicable cure period, Landlord covenants and agrees that Tenant shall enjoy quiet possession of the Site and the Easements without any disturbance from Landlord or any person lawfully claiming by or through Landlord except as expressly set forth in this Ground Lease.

9. Use of Site; Development of Facility.

9.1 Use. During the Term, Tenant shall have exclusive use of the Site except as expressly set forth in this Ground Lease. Tenant may use the Site and the Easement Areas for purposes related to due diligence investigations and studies, and the construction, use, operation, repair, ownership, replacement, expansion, modification, upgrade or maintenance of the Facility.

9.2 Construction of the Facility.



(a) General Provisions. Tenant, at its expense, shall be responsible for obtaining any Governmental Approvals (hereinafter defined) necessary for the construction and operation of the Facility. To the extent permitted by law, all permits, licenses, exemptions and certifications for the construction of the Facility shall be in the name of and for the benefit of Tenant or a party designated by Tenant.

(b) Facility.

(i) Landlord shall ensure that neither Landlord nor any other person or entity claiming by or through Landlord shall interfere with or obstruct in any way Tenant's use of the Site for the construction, installation, maintenance, repair or replacement of the Facility except as expressly set forth in this Ground Lease. Without limiting the generality of the foregoing, Landlord shall not locate any new equipment, construct any new improvements, or relocate any existing equipment or other improvements upon the Site (or permit any other person or entity to do so) without Tenant's prior written consent, which consent shall not be unreasonably withheld or delayed.

(ii) All improvements and alterations to the Site and the electrical interconnection facilities located within the Electrical Interconnection Easement Area shall be made in accordance with the Manual for Planning and Execution of State Permanent Improvements (the "Manual") published by Office of the State Engineer ("OSE"), including without limitation all applicable codes and standards described in Chapter 5 thereof. Prior to any installation or alterations of the Facility, Tenant will submit detailed engineering plans to Landlord and OSE for review and approval. Tenant will not commence any installation or alteration work until Landlord is reasonably satisfied that the installations or alterations can be completed and the equipment installed can be operated and maintained without unreasonable interference with Landlord's operations at its site, and both OSE and Landlord's planning office have approved all construction plans and specifications in accordance with the Manual or any applicable approved deviation therefrom.

(iii) All improvements to the Facility located within the Site and the electrical interconnection facilities located within the Electrical Interconnection Easement Area shall be at Tenant's expense, and the installation of all such improvements shall be at the discretion and option of the Tenant. Tenant shall have the right to replace, repair, add or otherwise modify its equipment or any portion(s) thereof, whether the equipment is specified or not on any exhibit attached hereto, during the Term of this Ground Lease provided such activities are performed in compliance with the Manual or as otherwise approved by Landlord and OSE. Landlord will, at its sole cost and expense, install, own, operate, maintain, repair, and, as necessary, replace all portions of the Condensate Interconnection Facilities (as defined in the SSPA) located anywhere external to the Site.

(iv) Tenant will maintain the Facility, the Steam lines and all other lines and connections on the Site or within the Electrical Interconnection Easement Area in good condition, reasonable wear and tear excepted. Landlord shall maintain the Steam lines and all other lines and connections on Landlord's Property or the Easement Areas (other than the electrical interconnection lines within the Electrical Interconnection Easement Area) in good condition, reasonable wear and tear excepted.

(v) At all times during the Term, Landlord shall not take or permit any action on or about the Site or any Easement Area that would obstruct the proper operation of or materially reduce the effectiveness or efficiency of the Facility.

(vi) As of the date of this Lease, Landlord represents that there are no installations, equipment or facilities of any type or nature on the Site or within the Electrical Interconnection Easement Area which will materially interfere with Tenant's use and operation of the Facility, fulfilling its obligations under the SSPA or producing and delivering electricity throughout the Term. Landlord and Tenant acknowledge and agree that there will not be an adequate remedy at law for noncompliance with the provisions of this Section, and therefore Tenant shall have the right to equitable remedies, including without limitation the remedies of injunctive relief and specific performance to enjoin any use that has a material adverse effect on or results in a material interference with Tenant's business or operations at the Site or the amount of Steam or electricity generated by the Facility.



(vii) Tenant conducts criminal background checks on its employees in accordance with its policies and procedures, and will refrain bringing or sending the employee(s) to the Site, Clemson University or other property owned by Landlord that Tenant reasonably believes poses a threat to property or persons. Tenant agrees to impose this same criminal background check requirement on any contractors used by Tenant in fulfillment of its responsibilities under this agreement. Landlord reserves the right to verify compliance by Tenant upon request.

(viii) It is understood and agreed that Tenant shall be permitted to use contractors to perform its obligations under this Ground Lease. Notwithstanding the use of contractors engaged by Tenant, Tenant shall remain fully liable for the performance of its obligations and such delegation shall not relieve Tenant from any of Tenant's obligations or liabilities under this Ground Lease. Tenant shall cause the contractor to comply with the terms and conditions of this Ground Lease in the performance of any work performed hereunder.

(c) Governmental Approvals. It is understood and agreed that Tenant's ability to use the Site is contingent upon its obtaining, after the execution date of this Lease, all of the certificates, permits and other approvals, including but not limited to, approval of the state regulatory commission, that may be required by any Federal, State or Local authorities (collectively the "Governmental Approvals") in order to permit Tenant's use of the Site or the Easement Areas as set forth above. At Tenant's request, Landlord shall, at no additional expense to Landlord, cooperate with Tenant in obtaining such Governmental Approvals and shall join with Tenant in all such applications and proceedings required by Tenant to facilitate the issuance of such Governmental Approvals. In the event that any of such applications for such Governmental Approvals should be finally rejected prior to the expiration of the Development Period or in the event Tenant determines that such Governmental Approvals may not be obtained prior to the expiration of the Development Period, Tenant shall have the right to terminate this Ground Lease. Notice of the Tenant's exercise of its right to terminate pursuant to the foregoing sentence shall be given to Landlord in writing prior to the expiration of the Development Period.

9.3 Maintenance. During the Term, Tenant shall be responsible, at its sole cost and expense, for the general maintenance of the Site in a good condition and repair in accordance with first-class standards consistent with the maintenance of Landlord's Property. Landlord is not obligated to repair, replace or maintain the Site.

9.4 Access. During the Term, Landlord shall allow (and Tenant may construct) a permanent means of ingress and egress to and from the Facility between the Facility and the most convenient public road (or private road consistently maintained by Landlord and constantly available for Tenant's use) which shall be operated and maintained by Tenant and shall be cleared, graded, improved and maintained with a surface passable at all times by a two-wheel drive vehicle. The improvements to the ingress and egress area shall be made in accordance with the Manual published by OSE, including without limitation all applicable codes and standards described in Chapter 5 thereof. Prior to any installation of such improvements, Tenant will submit detailed engineering plans to Landlord and OSE for review and approval, including the location of such ingress and egress improvements. Tenant will not commence any installation work until Landlord is reasonably satisfied that the installations can be completed and the equipment installed can be operated and maintained without unreasonable interference with Landlord's operations at its site, and OSE and Landlord's planning office has approved all construction plans and specifications in accordance with the Manual, such approval by Landlord's planning office not to be unreasonably withheld, conditioned or delayed (it being acknowledged that Landlord has no control over the approval of the construction plans and specifications by the OSE).

9.5 Liens. Tenant shall keep the Site and Easement Areas free and clear of any lien or encumbrance arising out of work performed, materials furnished or obligations incurred in connection with Tenant's obligations for construction, utilities and services, repairs or alterations under this Ground Lease. In the event any lien is placed upon the Site or Easement Areas as a result of any act or omission of Tenant, Tenant shall pay such lien or may provide a bond or otherwise insure Landlord against such lien within 60 calendar days after notice to Tenant of such lien being perfected, and may thereafter contest such lien or payment at Tenant's sole cost and expense. Tenant shall indemnify Landlord against any loss, damage, cost or expenses in connection with any such lien or encumbrance that may be claimed or asserted against the Site or Easement Areas. If Tenant fails to discharge any lien created or established in violation of Tenant's covenant herein, Landlord, without declaring a default hereunder

and without relieving Tenant of any liability hereunder, may, but shall not be obligated to, discharge or pay such lien (either by paying the amount claimed to be due or by procuring the discharge of such lien by deposit or by bonding proceedings), and any amount so paid by Landlord and all costs and expenses incurred by Landlord in connection therewith shall be paid immediately by Tenant to Landlord upon demand.

10. Insurance.

10.1 Tenant's Coverage. Tenant will maintain during the term of this Lease, and will require any general contractor of Tenant retained to perform significant construction or demolition work at the Facility or on the Site to maintain during the term of such work, the insurance coverage set forth below with insurance companies having an A.M. Best credit rating of "A-, VII" or better, with minimum coverage limits indicated below on policies issued on an "occurrence" basis, and naming Landlord and Tenant, and their respective officers, directors, shareholders, agents, independent contractors and Affiliates as additional insureds for ongoing and completed operations on all policies except workers compensation and employers liability:

(a) Umbrella Insurance Coverage. Umbrella insurance coverage in the amount of \$5,000,000 and excess or umbrella liability insurance coverage with a limit of not less than \$5,000,000 per occurrence and per project. These limits will apply in excess of each of the below mentioned policies.

(b) Commercial General Liability. Commercial general liability insurance that covers bodily injury, personal injury, and property damage, including products liability and contractual liability coverage, with per occurrence limits of not less than \$1,000,000 and an aggregate limit of not less than \$2,000,000 and (x) which will include "contractual" coverage for the indemnity clause set forth in Section 12.1(a) below, and (y) with coverage written on a primary and non-contributory basis.

(c) Property Insurance. Commercial property insurance insuring all improvements, fixtures and personal property located on the Site from time to time in an amount equal to 100% of the full replacement cost thereof, subject to a deductible reasonably acceptable to Landlord; said commercial property insurance policy will insure against the perils of fire and extended coverage and will include "special form" property insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief carried with a reputable insurance company authorized or qualified to do business in the State of South Carolina ("State").

(d) Workers' Compensation Insurance. Workers' compensation insurance (or qualification as a self-insurer) covering its employees in amounts at least equal to the minimum coverage amounts provided under the laws of South Carolina, notwithstanding any provision limiting requirements to a particular number of employees. Seller will provide for, or require any Subcontractor (as defined below) to maintain, similar coverage for the Subcontractor's employees employed in connection with this Agreement. The insurance required under this Section 10.1(d) will bear an endorsement evidencing a waiver of the right of subrogation against Landlord.

(e) Employers' Liability Insurance. Employers' liability insurance that covers both "bodily injury by accident" and "bodily injury by disease" with limits of not less than \$1,000,000 each accident/\$1,000,000 disease policy limit/\$1,000,000 each employee.

(f) Automobile Liability Insurance. Automobile liability insurance coverage (including coverage for claims against Tenant for injuries to employees of Landlord or any of its subcontractors) for owned, non-owned, and hired autos with a limit of not less than \$1,000,000 per accident.

(g) Builder's Risk Insurance. During any period within which any construction or installation of any improvements, fixtures or personal property at the Site is taking place, "special form" builder's risk insurance upon such improvements, fixtures or personal property to the full replacement value thereof. Said builder's risk insurance policy will insure against the perils of fire and extended coverage and will include "special form" builder's risk insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief.



(h) Policy Terms. The liability policy carried by Tenant as described above (a) shall be primary with respect to any other insurance which may be carried by Landlord, and (b) shall include Landlord, as an additional insured.

10.2 Landlord's Coverage. Landlord shall maintain Commercial General Liability Insurance covering legal liability for bodily injury (including death), property damage and personal injury in an amount not less than one million dollars (\$1,000,000) per occurrence. This insurance shall include under each of its respective policies its employees with respect to their participation in this Agreement while they are carrying out their official duties for the Landlord.

10.3 Certificates. Prior to commencement of construction of the Facility, Tenant shall provide Landlord with written evidence of the insurance required in Section 10.1 above in the form of appropriate insurance certificates specifying amounts of coverage and expiration dates of all policies in effect. Tenant agrees to make Landlord an additional insured on Tenant's commercial general liability and automobile liability policies, and will provide Landlord with copies of policy endorsements reflecting Landlord's status as an additional insured thereunder. With respect to the insurance provided to Landlord hereunder, (i) Tenant will procure from each insurer a waiver of subrogation in Landlord's favor and (ii) such insurance will be primary to any other insurance carried by Landlord. Insurance coverage provided by Tenant under this section will not include any of the following: (i) any claims made insurance policies; (ii) any self-insured retention or deductible amount greater than \$250,000.00, unless approved in writing by Landlord; (iii) any endorsement limiting coverage available to Landlord which is otherwise required by this section; and (iv) any policy or endorsement language that (A) limits the duty to defend Landlord under the policy or (B) provides coverage to Landlord only if Tenant is negligent.

10.4 Full Limits Coverage. Notwithstanding the minimum limits of coverage set forth above, Tenant will name Landlord, its officers, directors, employees, subsidiaries, successors, and assigns as additional insureds for the full limits of insurance coverage purchased by Tenant. The additional insured coverage provided pursuant to this Section 10.4 will provide coverage to Landlord for all claims, losses, demands, liens, causes of action or suits, judgments, fines, assessments, liabilities, damages and injuries (including death) covered by Article 12 herein below. Tenant is responsible for payment of all deductibles, self-insured retentions or similar charges for the additional insured coverage required pursuant to this Section 10.4.

10.5 Waiver of Insurance; Right to Self-Insure. In the event any insurance (including the limits of deductibles thereof) hereby required to be maintained, other than insurance required by law to be maintained, shall not be commercially available and commercially feasible in the commercial insurance market, in Tenant's reasonable determination, Tenant shall advise Landlord of same explaining in detail the basis for such conclusions. In such event, the applicable requirement shall be deemed waived, and Tenant shall be deemed to self-insure for such coverage(s). Any such waiver shall be effective only so long as such insurance shall not be available and commercially reasonable, in Tenant's reasonable discretion. Notwithstanding anything herein to the contrary, so long as Tenant is an affiliate of Duke Energy Corporation ("DEC"), Tenant shall have the right to self-insure through DEC as to any insurance required hereunder. With respect to any self-insurance by any Tenant, (i) such self-insurance by Tenant must be permitted by all federal, state, county, municipal and other governmental statutes, laws, rules, orders, regulations and ordinances affecting the Site and the Facility or otherwise applicable to Tenant, (ii) Tenant shall maintain a tangible net worth of at least Five Hundred Million and no/100 Dollars (\$500,000,000.00), and (iii) Tenant will protect Landlord to the same extent as it would if it had the insurance policies required hereunder. If and when Tenant shall elect to self-insure through DEC, then Tenant shall give notice thereof to Landlord which notice shall certify that the net worth of Tenant is not less than \$500,000,000.00. In addition, simultaneously with the delivery of said notice, Tenant shall deliver to Landlord unaudited financial statements for Tenant for the most recent fiscal year, which financial statements shall be prepared in accordance with generally accepted accounting principles and certified as true and correct by an officer or partner of Tenant, and Tenant shall provide updated financial statements within thirty (30) days after a written request therefore from Landlord (such request to be made not more frequently than once every twelve (12) month cycle) so long as the Tenant continues to self-insure. The minimum amounts of insurance coverage required hereunder will not be construed to create a limit on Tenant's liability with respect to its indemnification obligations hereunder. The foregoing right of any Tenant that is not an affiliate of DEC to self-insure will not apply with respect to insurance coverage related to accidental death and dismemberment, which policy will at all times be maintained with a third party provider and will consist of coverage that is consistent with the requirements set forth in Section 10.1(b).



10.6 Right to Cure. If a Party fails to procure or maintain any insurance required pursuant to Article 10, the other Party will have the right, but not the obligation, upon not less than 30 days prior written notice from such other Party to the non-performing Party, to procure such insurance on behalf of the non-performing Party and in any such event such other Party will be entitled to recover the premiums paid for such insurance as an amount due under this Lease.

11. Damage or Destruction of Facility. If, at any time during the term of this Ground Lease, the Facility shall be wholly or partially damaged or destroyed by Casualty, then Tenant shall cause the same to be repaired, replaced, or rebuilt in accordance with this Article 11 and all requirements of Section 9.2 within twelve (12) months after the occurrence of the damage or destruction. The repairs shall restore the Facility to a condition which is not less than the condition it was in immediately prior to the Casualty. The repairs shall be made in a good and workmanlike manner using new, quality materials, products and equipment; and the Facility, after completion of the repairs, shall conform and otherwise comply in all material respects with all applicable laws. All insurance proceeds paid by Tenant's insurers on account of the Casualty shall be paid to Tenant as its sole property, to be used by Tenant in connection with repairing the Facility, if applicable. Notwithstanding anything to the contrary contained herein, Tenant shall have the option to terminate this Lease by written notice to Landlord given within ninety (90) days after the occurrence of any material damage or destruction that renders the Facility unfit, in Tenant's commercially reasonable discretion, for the generation and delivery of Steam, if the damage or destruction occurs within the last sixty (60) months of the Term of this Ground Lease and Tenant shall surrender the Site and the Easement Areas as provided in Article 6 above.

12. Liabilities.

12.1 General.

(a) Tenant shall indemnify, defend and hold Landlord and Landlord's Parties harmless from any and all third party claims, losses, expenses, liabilities, actions, suits, or judgments for personal injury or property damage (collectively, "Losses") by reason of, resulting from, whether directly or indirectly, or arising out of or related to (i) Tenant's or Tenant's Parties' ownership, operation, use or maintenance of the Facility, the Easement Areas or the Site; (ii) the negligence or willful misconduct of Tenant or any Tenant Party in connection with the transactions contemplated by this Ground Lease; (iii) any release of Hazardous Materials on the Site caused or permitted by Tenant or any Tenant Party; or (iv) any environmental claim from a third party with regard to a violation or alleged violation of any Environmental Laws by Tenant or any Tenant Party.

(b) The provisions of this Section 12.1 shall survive the expiration or termination of the Term.

12.2 Consequential Damages. Notwithstanding anything to the contrary in this Ground Lease, neither Party hereto shall be liable to the other for consequential or punitive damages, including but not limited to loss of use or loss of profit or revenue.

13. Default.

13.1 Events of Default. The following events shall be deemed to be events of default by Tenant ("Tenant Events of Default") under this Ground Lease:

(a) Failure to pay any payment required to be made hereunder, including taxes or any other sum to be paid hereunder within 20 Business Days after the date the same is due which shall have remained unpaid for 20 Business Days after written notice of such failure has been given to Tenant by Landlord.

(b) Failure to comply in any material respect with any material term, provision or covenant of this Ground Lease, other than the payment of sums to be paid hereunder, without curing such failure within 60 days after due written notice thereof from Landlord to the extent such failure is capable of being cured within such 60 day period; or if such failure cannot reasonably be cured within the said 60 days and Tenant shall not

have commenced to cure such failure within said period and shall not thereafter with reasonable diligence and good faith proceed to cure such failure.

(c) Any Event of Default (as defined in the SSPA) by Tenant under the SSPA.

(d) Tenant shall file in any court pursuant to any statute, either of the United States or any state, a petition in bankruptcy or insolvency, or for reorganization, or for the appointment of a receiver or trustee of all or any portion of Tenant's property, or makes an assignment for benefit of creditors; or there is filed against Tenant in any court pursuant to any statute either of the United States or any state, a petition in bankruptcy or insolvency, or for reorganization, or for the appointment of a receiver or trustee of all or any portion of Tenant's property, and within 90 days after the commencement of any such proceeding against Tenant, such petition shall not have been dismissed.

13.2 Landlord's Remedies. Upon the occurrence of any Tenant Event of Default, Landlord may, at its option, and in addition to and cumulatively of any other rights Landlord may have at law or in equity or under this Ground Lease, (a) cure the Tenant Event of Default on Tenant's behalf, in which event Tenant shall reimburse Landlord on demand for all reasonable sums so expended by Landlord or Landlord may elect to offset any such reasonable amounts against subsequent installments of any sums due from Landlord to Tenant hereunder or under the SSPA, (b) enforce, by all proper and legal suits and other means, its rights hereunder, including the collection of sums due hereunder, in which event Landlord shall have all remedies available at law or in equity, and should it be necessary for Landlord to take any legal action in connection with such enforcement, the Tenant shall pay Landlord all reasonable attorney's fees and expenses incurred in such legal action (as determined in the discretion of the court hearing such matter), all without prejudice to any remedies that might otherwise be used by Landlord for recovery or arrearages of sums due hereunder, damages as herein provided, or breach of covenant. Notwithstanding the forgoing, in the event of a bona fide dispute between the Parties regarding an alleged default by Tenant hereunder or under the SSPA, Landlord's remedies as to the default shall not commence until ten (10) business days after a final determination has been made by a court of competent jurisdiction in Landlord's favor.

13.3 Landlord Events of Default. The following events shall be deemed to be events of default by Landlord ("Landlord Events of Default") under this Ground Lease:

(a) Failure to pay any payment required to be made hereunder within 20 Business Days after the date the same is due which shall have remained unpaid for 20 Business Days after written notice of such failure has been given to Landlord by Tenant.

(b) Failure to comply in any material respect with any material term, provision or covenant of this Ground Lease, other than the payment of sums to be paid hereunder, without curing such failure within 60 days after due written notice thereof from Tenant; or if such failure cannot reasonably be cured within the said 60 days and Landlord shall not have commenced to cure such failure within said period and shall not thereafter with reasonable diligence and good faith proceed to cure such failure.

(c) Any act or omission of Landlord that in any way, directly or indirectly, materially adversely impacts, materially affects or materially impairs Tenant's ability to operate the Facility and/or the operation of the Facility for Tenant's contemplated use thereof.

13.4 Tenant's Remedies. Upon the occurrence of any Landlord Event of Default, Tenant may, at its option, and in addition to and cumulatively of any other rights Tenant may have at law or in equity or under this Ground Lease, (a) cure the Landlord Event of Default on Landlord's behalf, in which event Landlord shall reimburse Tenant on demand for all reasonable sums so expended by Tenant or Tenant may elect to offset any such reasonable amounts against subsequent installments of any sums due from Tenant to Landlord hereunder, or (b) enforce, by all proper and legal suits and other means, its rights hereunder, including the collection of sums due hereunder, in which event Tenant shall have all remedies available at law or in equity, all without prejudice to any remedies that might otherwise be used by Tenant for recovery or arrearages of sums due hereunder, damages as herein provided, or breach of covenant. Notwithstanding the forgoing, in the event of a bona fide dispute between the Parties regarding an alleged default by Landlord hereunder or under the SSPA, Tenant's remedies as to the



default shall not commence until ten (10) business days after a final determination has been made by a court of competent jurisdiction in Tenant's favor.

14. Governing Law. This Ground Lease and all provisions hereof, shall be governed by and interpreted in accordance with the laws of the State of South Carolina.

15. Condemnation. If at any time the Site, the Easements, or any portion thereof is condemned or transferred in lieu of condemnation, the net proceeds of such condemnation or transfer shall be divided between Landlord and Tenant (or Tenant's designee) in the proportions specified in the condemnation award or agreement of transfer or, if not so specified, in proportion to the fair value of Landlord's and Tenant's respective interests in the Site and the Easements, provided that to the extent that the net proceeds of any condemnation or transfer in lieu of condemnation are attributable to the Facility or improvements constructed by or on behalf of Tenant on the Site and/or the Easements, such proceeds shall be paid solely to Tenant or Tenant's designee, with Landlord receiving any proceeds attributable solely to the residual value of the fee estate of the Site. For the purpose of this Article 15 the net proceeds of a condemnation or transfer in lieu of condemnation shall mean the total proceeds of such condemnation or transfer less the costs and expenses incurred in connection therewith (including legal fees). If the entire Site is condemned or transferred in lieu of condemnation, the Term shall terminate at the time title vests in the condemning authority. If a portion of the Site is condemned or transferred in lieu of condemnation, the Lease shall continue in full force and effect with respect to that portion of the Site which has not been so condemned or transferred. Notwithstanding the foregoing, Tenant may terminate this Ground Lease without penalty by giving written notice of termination to Landlord if, in Tenant's reasonable discretion, the Site or the Easements are not suitable for Tenant's intended use following such condemnation or transfer in lieu thereof.

16. Maintenance Responsibilities of Parties. No party shall have any duty or responsibility to the other Party in respect of the Site or the Easement Areas or the use, maintenance or condition thereof except such obligations of such Party as are specifically set forth in this Ground Lease, the SSPA, or any instrument creating the Easements.

17. Mortgage of Tenant's Interest.

17.1 Provided Tenant is not in default of its obligations under this Lease or the SSPA beyond any applicable cure periods, Tenant may at any time, with prior written notice to Landlord, elect to finance a portion of the cost of the Facility with one or more financial institutions, leasing companies, institutions or affiliates or subsidiaries thereof (each a "Financing Party," collectively, the "Financing Parties") and in connection therewith Tenant would enter into various agreements and execute various documents relating to such financing, which documents may, among other things, assign Tenant's interests under this Ground Lease and the Easements to a Financing Party or grant a first priority security interest in Tenant's interest in the Facility and/or this Ground Lease and Tenant's other interests in and to the Site, including, but not limited to, any easements, rights of way or similar interests (such documents, "Financing Documents"). Landlord acknowledges notice of the foregoing and, subject to the provisions of this Article 17, consents to the foregoing actions and Financing Documents described above, provided that in no event shall Tenant be released from any liability under this Ground Lease and in no event shall Landlord's fee interest in the Site or land underlying any easements, rights of way or similar interest be encumbered by such Financing Documents. Upon reasonable prior notice to Landlord, Landlord agrees to execute, and agrees to use good faith reasonable efforts to obtain from any and all of Landlord's lenders, such subordination agreements, consents, estoppels and other acknowledgements of the foregoing as Tenant or the Financing Parties may reasonably request and which are reasonably acceptable to Landlord and its lenders. Landlord agrees that if requested in writing by Tenant, Landlord will thereafter furnish the Financing Parties with a counterpart of each notice or other document delivered by Landlord to Tenant in connection with this Ground Lease.

17.2 Provided Landlord has been provided with written notice by a Financing Party requesting that the Financing Party be given notice of a default by Tenant under this Lease, Landlord agrees that it shall not terminate this Ground Lease unless it has given each such Financing Party at least 30 days' prior written notice of its intent to terminate this Ground Lease, or such longer period (not to exceed ninety (90) days) in the event Financing Party may need to acquire the rights of the Tenant under the Ground Lease and possession of the Site in order to cure such default, and the Financing Party fails to cure the condition giving rise to such right of termination within such time



period, as same may be extended; provided that, in no way shall Landlord be liable to any Financing Party for failure to give notice as provided herein.

17.3 If the default under this Ground Lease is of such a nature that it cannot be practicably cured without first taking possession of the Facility and the Site or if such default is of a nature that is not susceptible of being cured by a Financing Party and provided Landlord has been provided with written notice by a Financing Party requesting that the Financing Party be given notice of a default by Tenant under this Lease, then Landlord shall not be entitled to terminate this Ground Lease by reason of such default if and so long as the Financing Party proceeds diligently (but in no event more than 30 days after Landlord delivers notice of a default by Tenant under this Lease to the Financing Party) to attempt to obtain possession of the Facility and the Site pursuant to the rights of the Financing Party under the Financing Documents and upon obtaining such possession, the Financing Parties shall proceed diligently to cure such default.

17.4 A Financing Party shall not be required to continue to proceed to obtain possession, or to continue in possession of the Site, pursuant to Section 17.3 if and when such default is cured. If the Financing Party, or a purchaser through foreclosure under the Financing Documents or otherwise, shall (a) acquire title to the Facility and the Tenant's leasehold estate created by this Ground Lease, (b) cure all defaults (including without limitation, the payment of all monetary obligations of Tenant due under the Lease), (c) assume all the obligations of Tenant hereunder, and (d) provide Landlord with adequate assurances, as determined in Landlord's reasonable discretion, that the obligations of the Tenant to provide Landlord services under the SSPA shall continue uninterrupted notwithstanding the acquisition of the Facility and the Tenant's leasehold estate, then Landlord shall recognize the Financing Parties or such purchaser, as the case may be, as if such party had been the Tenant under this Ground Lease; provided, however, that Landlord's recognition of the Financing Party or its purchaser pursuant to this Section 17.4 shall not constitute a waiver of such default and Landlord's rights as a result thereof as against Tenant.

#### 18. Landlord's Representations and Covenants.

18.1 Condition of Title; Authority; Enforceability. Landlord represents as of the Effective Date that Landlord owns fee title to the Site and the Easement Areas free and clear of any lien, interest or encumbrance, subject only to all matters and exceptions of public record or disclosed by an accurate survey (the "Permitted Exceptions"). At any time on or after the Effective Date Tenant may obtain for itself and/or any Financing Party, at Tenant's expense, an ALTA Extended Coverage policy of title insurance in a form and with exceptions acceptable to Tenant in its sole discretion (the "Title Policies"). Landlord agrees to cooperate fully and promptly with Tenant in its efforts to obtain the Title Policies, and Landlord shall take such actions as Tenant may reasonably request in connection therewith at no cost to Landlord. Landlord represents that (a) there are no pending or threatened claims, actions or suits affecting the Site or Landlord's interest in the Site or the Easement Areas; (b) the execution and performance of this Ground Lease by Landlord does not violate any contract, agreement or instrument to which Landlord is a party; (c) the execution, delivery and performance by it under this Ground Lease have been duly authorized by all necessary action by Landlord, and do not violate any provision of any current law applicable to Landlord, the Site or the Easement Areas or any order, judgment or decree of any court or other agency presently binding on Landlord or conflict with or result in a breach of or constitute a default under any contractual obligation of Landlord; and (d) this Ground Lease is the legally valid and binding obligation of Landlord enforceable against it in accordance with its terms except as enforcement may be limited by bankruptcy, insolvency, or reorganization, moratorium or similar laws or equitable principles relating to limiting creditors' rights generally.

18.2 Environmental. Landlord represents that, to the best of Landlord's knowledge, as of the Effective Date (a) the Site and Easement Areas are free of known or identified Hazardous Materials, no Hazardous Materials have ever been produced or disposed upon the Site or the Easement Areas, no Release has occurred on the Site or the Easement Areas and Hazardous Materials have not migrated to the Site or the Easement Areas, (b) the Site and the Easement Areas are in material compliance with all Environmental Laws, (c) neither the Site nor the Easement Areas are subject to any Environmental Liability, threatened Environmental Liability or alleged Environmental Liability, and (d) Landlord has not received notice of any violation of Environmental Laws affecting the Site or the Easement Areas.

18.3 Subordination Agreements. Landlord shall, at its expense, promptly remove, or cause to be subordinated to the Ground Lease all monetary obligations and any related liens that are described as exceptions to

the Title Policies. Any such subordination agreement shall be in a form as may be reasonably acceptable to Tenant, which provides, among other things, that Tenant's occupancy or use of the Site in accordance with the terms of this Ground Lease will not be disturbed so long as Tenant is not in default under the terms of this Ground Lease or the SSPA beyond any applicable notice and cure period.

19. Tenant's Representations, Warranties, and Covenants.

19.1 Authority; Enforceability. Tenant represents and warrants that (a) the execution and performance of this Ground Lease by Tenant does not violate any contract, agreement or instrument to which Tenant is a party; (b) the execution, delivery and performance by it under this Ground Lease have been duly authorized by all necessary action by Tenant, and do not violate any provision of any current law applicable to Tenant, the Site or the Easement Areas or any order, judgment or decree of any court or other agency presently binding on Tenant or conflict with or result in a breach of or constitute a default under any contractual obligation of Tenant; and (c) this Ground Lease is the legally valid and binding obligation of Tenant enforceable against it in accordance with its terms except as enforcement may be limited by bankruptcy, insolvency, or reorganization, moratorium or similar laws or equitable principles relating or limiting creditors rights generally.

19.2 Environmental. Tenant hereby covenants that Tenant and its agents, employees and contractors will not generate, store, use, treat or dispose of any Hazardous Materials in, on or at the Site or any part of the Facility, except for Hazardous Materials as are commonly legally used or stored (and in such amounts as are commonly legally used or stored) as a consequence of using the Facility for the permitted use hereunder, but only so long as the quantities thereof do not pose a threat to public health or to the environment or would necessitate a "response action", as that term is defined in CERCLA, and so long as Tenant strictly complies or causes compliance with all laws, statutes, rules, orders, regulations, ordinances and decrees concerning the use or storage of such Hazardous Substances. Tenant further covenants that neither the Site nor any part of the Facility shall ever be used by Tenant or its agents, contractors or employees as a dump site or storage site (whether permanent or temporary) for any Hazardous Substances during the Term.

20. Utilities. Tenant shall pay for all Utilities consumed by Tenant at the Site during the Term.

21. Taxes.

21.1 Covenant to Pay Taxes and Assessments. Tenant shall be responsible for and shall pay the Taxes and Assessments, if any, as hereinafter defined, which are imposed on the Site, the Facility or Tenant's operations at the Site. "Taxes and Assessments" shall mean all taxes, assessments or other impositions, general or special, ordinary or extraordinary, of every kind or nature, which may be levied, assessed or imposed upon or with respect to the Site, the Facility or Tenant's operations at the Site or any improvements, fixtures, equipment or personal property of Tenant at any time situated thereon, including, but not limited to, any ad valorem and inventory taxes. Landlord shall pay (i) any transfer or conveyance tax arising out of this Ground Lease, and (ii) all taxes and assessments regarding the Site, if any. Landlord shall also timely pay all taxes, assessments or other impositions which may be levied, assessed or imposed upon or with respect to the Easement Area(s) (and with respect to the Easement Areas regarding the Electrical Interconnection Easement, any buildings, improvements, fixtures, equipment or personal property situated thereon belonging to anyone other than Tenant), if any. Tenant shall not be responsible for the payment of any income or similar tax due and payable on Landlord's receipt of the rental payment under this Ground Lease or any taxes regarding the Site (other than as apportioned to the Facility equipment and property owned by Tenant) or Landlord's real property.

21.2 Tenant's Right to Contest Taxes. Without limiting the right of Landlord to contest any Taxes and Assessments levied against the Site, Tenant shall have the right to contest any Taxes or Assessments payable by Tenant, provided, Tenant shall, in good faith and with due diligence, contest the same or the validity thereof by appropriate legal proceedings which shall have the effect of preventing the collection of the tax or assessment and the sale or foreclosure of any lien for such tax or assessment. Tenant shall have the right, at its sole expense, to institute and prosecute, in Landlord's name, any suit or action to contest any tax or assessment payable by Tenant or to recover the amount of any such tax or assessment but, in such event, Tenant hereby covenants and agrees to indemnify and save Landlord harmless from any and all reasonable and documented costs and expenses, including attorneys' fees, in connection with any such suit or action. Any funds recovered by Tenant as a result of any such



suit or action shall belong to Tenant except to the extent any such recovery relates to a period of time that is not part of the Term. Any part of such recovery relating to a period not part of the Term shall be paid to Landlord.

22. Assignment.

22.1 Assignment by Landlord. Landlord may sell, assign or transfer all (but not less than all) of its interest in the Site or this Ground Lease at any time to a successor in interest (who must expressly assume the obligations of Landlord hereunder), and Landlord shall thereafter be released or discharged from all of its covenants and obligations hereunder, except such obligations as shall have accrued prior to any such sale, assignment or transfer, and Tenant agrees to look solely to such successor in interest of Landlord for performance of such obligations arising after such sale, transfer or assignment. In the event of such sale, assignment or transfer of its interest, Landlord shall promptly notify Tenant of same. Landlord shall also have the right to place a mortgage or deed of trust upon the Site, in which event this Ground Lease shall be subordinate to the lien of any deed of trust or mortgage, provided that the beneficiary of such deed of trust or mortgage shall agree in writing, that so long as Tenant is not in default under the terms of this Ground Lease beyond any applicable notice and cure period as set forth herein, such beneficiary shall not disturb Tenant's rights under this Ground Lease.

22.2 Assignment by Tenant. Tenant may not sell, assign, sublease, mortgage, pledge, or otherwise transfer its interest in the Site or this Ground Lease without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. Notwithstanding the immediately preceding sentence, Tenant may, without the consent of Landlord, assign or sublease this Ground Lease to (a) any entity which controls, is controlled by or under common control with Tenant; (b) any entity resulting from the merger or consolidation of Tenant; (c) any person or entity which acquires all of the assets of Tenant as a going concern of the business that is being conducted on the Site, provided that said transferee assumes all of the obligations of Tenant under the Ground Lease; or (d) or , subject to the provisions of Article 17, any Financing Party in connection with the financing and/or construction of the Facility on the Site. Tenant shall remain liable for all obligations of Tenant under this Ground Lease in connection with any assignment or sublease of this Ground Lease unless, in the case of an assignment, such assignment is a part of a merger or other transaction in which all or substantially all of the assets of Tenant are acquired by the assignee or an affiliate of such assignee or if such assignee has a net worth at the time of the assignment of not less than \$500,000,000.00.

23. Ownership of Electricity and Environmental Attributes And Incentives. Landlord and Tenant agree that Tenant (or its Affiliate) is the exclusive owner of electricity (kWh) generated by the Facility and the exclusive owner of any applicable Environmental Attributes of the Facility now or hereafter in effect (if any), and that Tenant shall have the exclusive right to any applicable proceeds related to the sale or other transfer of such electricity generated by the Facility as well as the right to report to any federal, state or local agency, authority or other party that Tenant or its Affiliate is the exclusive owner of any applicable Environmental Attributes and Environmental Incentives. As used herein, "Environmental Attributes" means the characteristics of electric power generation at the Facility that have intrinsic value, separate and apart from the energy output therefrom (the "Energy Output"), arising from the perceived environmental benefits of the Facility. Further, as used herein, "Environmental Incentives" means all rights, credits (including without limitation all tax credits, as above described), rebates, benefits, reductions, offsets, and allowances and entitlements of any kind, howsoever entitled or named (including carbon credits and allowances), whether arising under federal, state or local law, international treaty, trade association membership or the like, arising from the Environmental Attributes of the Facility or the energy output therefrom or otherwise from the development or installation of the Facility or the production, sale, purchase, consumption or use of the Energy Output.

24. Miscellaneous.

24.1 Notices. Any notice, consent or other formal communication required or permitted to be given by a Party pursuant to the terms of this Agreement shall be in writing and shall be deemed delivered (a) when delivered personally or by email, unless such delivery is made (i) on a day that is not a business day in the place of receipt or (ii) after 5:00 p.m. local time on a business day in the place of receipt, in either of which cases such delivery will be deemed to be made on the next succeeding business day, (b) on the next business day after timely delivery to a reputable overnight courier and (c) on the business day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid), addressed as follows (or to such other address or having



such other contact information as either Party may hereafter specify for such purpose by like notice to the other Party from time to time):

- (a) if to Tenant, addressed to:

Duke Energy Carolinas, LLC  
400 South Tryon Street  
Floor 14  
Charlotte, NC 28202  
Attention: Zachary Kuznar  
Phone: (704) 382-9644  
Email: zachary.kuznar@duke-energy.com

With a copy to:

Duke Energy Carolinas, LLC  
Office of General Counsel  
550 South Tryon Street DEC45A  
Charlotte, NC 28202  
Attention: Karol Mack  
Phone: (704) 382-8165  
Email: karol.mack@duke-energy.com

- (b) if to Landlord, addressed to:

Clemson University  
207 Sikes Hall  
Clemson, SC 29634  
Attention: General Counsel

with a copy to:

Nelson Mullins Riley & Scarborough LLP  
Poinsett Plaza, Suite 900  
104 South Main Street  
Greenville, SC 29601  
Attention: D. Sean Faulkner

or to such other address as either Party shall from time to time designate in writing to the other Party.

24.2 Counterparts; Signatures. This Ground Lease may be executed in counterparts. All executed counterparts shall constitute one agreement, and each counterpart shall be deemed an original. The parties hereby acknowledge and agree that facsimile signatures or signatures transmitted by electronic mail in so-called "pdf" format shall be legal and binding and shall have the same full force and effect as if an original of this Ground Lease had been delivered. Landlord and Tenant (i) intend to be bound by the signatures on any document sent by facsimile or electronic mail, (ii) are aware that the other party will rely on such signatures, and (iii) hereby waive any defenses to the enforcement of the terms of this Ground Lease based on the foregoing forms of signature.

24.3 Amendments. Neither this Ground Lease nor any of the terms hereof may be terminated, amended, supplemented, waived or modified orally, but only by an instrument in writing signed by the Party against which the enforcement of the termination, amendment, supplement, waiver or modification shall be sought.

24.4 Headings, etc. The headings of the various Articles and Sections of this Ground Lease are for convenience of reference only and shall not modify, define, expand or limit any of the terms or provisions hereof.

24.5 Successors and Assigns. The terms of this Ground Lease shall be binding upon, and inure to the benefit of, the Parties hereto and their respective successors and permitted assigns.

24.6 Confidentiality. Landlord and Tenant each agree to use commercially reasonable efforts to keep confidential, and not publicly disclose, the terms of this Ground Lease and any information provided by Landlord to Tenant or by Tenant to Landlord in relation to the transaction contemplated hereby; provided, however, that either Party may disclose the existence and terms of this Ground Lease to: (a) its consultants, agents, architects, independent contractors, or attorneys in connection with the execution of this Ground Lease, (b) any bona fide potential purchaser or lender of the Facility who agrees to keep such information confidential, (c) any third party to whom both Parties hereto have given their prior written consent for such a disclosure, or (d) governmental, administrative, regulatory or judicial authorities in the investigation of the compliance of the Site, the Facility and/or the Easement Areas with applicable legal requirements; and provided, further, that the non-disclosure obligations contained in this Section shall not apply to any such information that (i) is or becomes generally available to the public other than as a result of a disclosure by Tenant or Landlord, or their employees, agents or representatives, or (ii) Landlord or Tenant is compelled to disclose pursuant to any judicial, statutory or regulatory authority. The provisions of this Section shall survive the termination of this Ground Lease. The confidentiality requirements of this Ground Lease will not apply to confidential information to the extent that the Landlord is required to disclose such confidential information pursuant to applicable law or legal process, including the South Carolina Freedom of Information Act.

24.7 Interpretation. The Parties acknowledge that this Ground Lease, as executed, is the product of negotiations between Landlord and Tenant and that it shall be construed fairly, in accordance with its terms, and shall not be construed for or against either Party. No inferences as to the intention of the Parties shall arise from the deletion of any language or provisions of this Ground Lease.

24.8 Memorandum of Lease. Concurrently with the execution of this Ground Lease, Landlord and Tenant shall execute, acknowledge before a notary public, in recordable form, and deliver a short form memorandum of lease which shall be recorded by Tenant in the Official Records.

24.9 Severability. If any term or provision of this Ground Lease is, to any extent, determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Ground Lease shall not be affected thereby, and each remaining term and provision of this Ground Lease shall be valid and enforceable to the fullest extent permitted by law.

24.10 Time is of the Essence. Time is of the essence of this Ground Lease and each and every provision of this Ground Lease.

24.11 Consent and Approvals. Any consent or approval that a Party is obligated to give to the other Party shall not be unreasonably withheld or delayed, subject to any specific provision to the contrary contained in this Ground Lease.

24.12 Entire Agreement. This Ground Lease, including any exhibits and attachments hereto, constitutes the entire agreement between Landlord and Tenant relative to the matters and transactions contemplated herein. Landlord and Tenant agree hereby that all prior or contemporaneous oral or written agreements, or letters of intent, between and among themselves or their agents including any leasing agents and representative, relative to such matters and transactions are merged in or revoked by this Ground Lease.

24.13 Broker's Commission. Tenant represents and warrants that it has not dealt with any broker or agent in connection with this Ground Lease and Tenant agrees to indemnify and save Landlord harmless from any claims made by any brokers or agents claiming to have dealt with Tenant. Landlord represents and warrants that it has not dealt with any brokers or agents in connection with this Ground Lease, and Landlord agrees to indemnify and save Tenant harmless from any claims made by any brokers or agents claiming to have dealt with Landlord. The terms and provisions of this Section shall survive the termination or earlier expiration of this Ground Lease.



24.14 WAIVER OF JURY TRIAL. TO THE EXTENT PERMITTED BY LAW, THE PARTIES HEREBY WAIVE ANY AND ALL RIGHTS THAT THEY MAY NOW OR HEREAFTER HAVE UNDER THE LAWS OF THE UNITED STATES OF AMERICA OR ANY STATE, TO A TRIAL BY JURY OF ANY AND ALL ISSUES ARISING DIRECTLY OR INDIRECTLY IN ANY ACTION OR PROCEEDING RELATING TO THIS GROUND LEASE OR ANY TRANSACTIONS CONTEMPLATED HEREBY OR RELATED HERETO. IT IS INTENDED THAT THIS WAIVER SHALL APPLY TO ANY AND ALL CAUSES OF ACTION, DEFENSES, RIGHTS, CLAIMS AND/OR COUNTERCLAIMS, WHETHER IN CONTRACT, TORT OR OTHERWISE, IN ANY SUCH ACTION OR PROCEEDING. THE PARTIES UNDERSTAND THAT THIS WAIVER IS A WAIVER OF A CONSTITUTIONAL SAFEGUARD, AND THE PARTIES BELIEVE THAT THERE ARE SUFFICIENT ALTERNATE PROCEDURAL AND SUBSTANTIVE SAFEGUARDS, INCLUDING A TRIAL BY AN IMPARTIAL JUDGE, THAT ADEQUATELY OFFSET THE WAIVER CONTAINED HEREIN.

24.15 EXCULPATION. TENANT AGREES THAT TENANT SHALL LOOK SOLELY TO LANDLORD'S INTEREST IN THE SITE AND INSURANCE, CONDEMNATION AND SALES PROCEEDS THEREFROM OR LANDLORD'S PERSONAL PROPERTY USED IN CONNECTION THEREWITH FOR THE SATISFACTION OF ANY CLAIM, JUDGMENT OR DECREE REQUIRING THE PAYMENT OF MONEY BY LANDLORD BASED UPON ANY UNCURED DEFAULT BY LANDLORD HEREUNDER, AND NO OTHER PROPERTY OR ASSETS OF LANDLORD, ITS SUCCESSORS OR ASSIGNS, SHALL BE SUBJECT TO LEVY, EXECUTION OR OTHER ENFORCEMENT PROCEDURE FOR THE SATISFACTION OF ANY SUCH CLAIM, JUDGMENT, INJUNCTION OR DECREE.

24.16 Conflicts with SSPA. To the extent any of the provisions of this Ground Lease expressly conflict with the provisions of the SSPA, the terms and conditions of the SSPA shall control.

[Signatures Begin on Next Page]



IN WITNESS WHEREOF, the parties hereto have caused this Ground Lease to be duly executed by their respective officers thereto duly authorized as of the day and year first above written.

**LANDLORD:**

**Clemson University,**  
a body politic under the laws of the State of South Carolina

By: Brett A. Dalton  
Name: Brett A. Dalton  
Title: Executive Vice President of Finance & Operations

STATE OF S.C.  
COUNTY OF Pickens

The foregoing instrument was acknowledged before me this 2 day of Feb, 2017, by Brett Dalton, EVP of Clemson Univ., a body politic under the laws of SC.

W C Hood Jr  
Notary Public  
Printed Name of Notary: W C Hood Jr  
My Commission Expires: Jan 10, 2022

**TENANT:**

**Duke Energy Carolinas, LLC**

By: Rasha F. Caldwell  
Name: RASHA F. CALDWELL  
Title: GENERAL MANAGER

STATE OF North Carolina  
COUNTY OF Mecklenburg

The foregoing instrument was acknowledged before me this 10th day of January, 2017, by Robert F. Caldwell, President of Duke Energy Carolinas LLC, a



Andrea K. Bizzell  
Notary Public  
Printed Name of Notary: Andrea K. Bizzell  
My Commission Expires: June 25, 2017



**EXHIBIT B  
to Ground Lease**

**Definitions**

1. "Affiliate" means, when used with reference to a specified Person, any other Person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with the Person specified.
2. "Business Day" means any day other than Saturday or Sunday or a legal holiday observed by the State of South Carolina.
3. "Casualty" means any loss or destruction of or damages to the Facility or the Site resulting from any act of God, fire, explosion, earthquake, accident or the elements, whether or not covered by insurance and whether or not caused by the fault or negligence of either Party, or such Party's employees, agents, contractors, or visitors.
4. "Commercial Operation Date" means the date upon which Tenant notifies Landlord that the Facility is commercially operational.
5. "Development Period" means the period during which Tenant performs development activities, including but not limited to, obtaining permits and constructing the Facility, as more particularly defined in Section 2.1.1.
6. "Easements" has the meaning set forth in Section 5.
7. "Easement Areas" has the meaning set forth in Section 5.
8. "Effective Date" has the meaning set forth in the Preamble.
9. "Electrical Interconnection Easement" has the meaning set forth in Section 5.
10. "Energy Output" has the meaning set forth in Section 24.
11. "Environmental Attributes" has the meaning set forth in Section 24.
12. "Environmental Incentives" has the meaning set forth in Section 24.
13. "Environmental Laws" means any federal, state or local law, code, statute, ordinance, rule, regulation, rule of common law, guideline or informal policy position, relating to or imposing liability or standards of conduct concerning any hazardous, toxic or dangerous waste, substance or material; or any substances or mixture of any Hazardous Materials regulated thereunder, now or hereafter enacted or promulgated (collectively, and including, without limitation, any such laws which require notice of the use, presence, storage, generation, disposal or release of any Hazardous Materials to be provided to any party).
14. "Environmental Liability" means any action, lawsuit, claim or proceeding arising under or related in any way to the Environmental Laws or which seeks to impose liability for (a) noise; (b) pollution or contamination of the air, surface water, ground water or land or the clean-up of such pollution or contamination; (c) solid, gaseous or liquid waste generation, handling, treatment, storage, disposal or transportation; (d) exposure to or contamination by Hazardous Materials; (e) the safety or health of employees or (f) the manufacture, processing, distribution in commerce or use of Hazardous Materials. An "Environmental Liability" includes a common law action, whether direct or indirect, as well as a proceeding to issue, modify or terminate an Environmental Permit, or to adopt or amend a regulation to the extent that such a proceeding attempts to redress violations of an applicable permit, license, or regulation as alleged by any governmental authority.



15. "Environmental Permit" means any permit, license, approval or other authorization under any applicable Environmental Laws.

16. "Facility" means a combined heat and power facility or facilities and related utilities, improvements, equipment, facilities, appurtenances and other improvements to be developed, constructed, owned, operated and maintained on the Site and any applicable Easement Area(s), including but not limited to all structures, machinery, equipment, meters, fixtures, interconnections, ancillary equipment and materials, and all additions, alterations, expansions and modifications thereto as may be located on the Site and the Easement Areas.

17. "Financing Parties" has the meaning set forth in Section 17.

18. "Financing Documents" has the meaning set forth in Section 17.

19. "Force Majeure" means all events beyond the control of the Party affected, including without limitation flood, earthquake, storm, lightning, fire, explosion, war, riot, civil disturbances, strikes, and sabotage.

20. "Governmental Approvals" has the meaning set forth in Section 9.2(c).

21. "Ground Lease" has the meaning set forth in the Preamble.

22. "Hazardous Materials" means any flammable, reactive, explosive, corrosive or radioactive materials or hazardous, toxic or dangerous wastes, substances or related materials or any other chemicals, materials, wastes or substances, exposure to which is prohibited, limited or regulated by a federal, state, county, regional or local authority, or any Environmental Laws.

23. "Official Records" means the Official Records maintained by the office of the Register of Deeds of Pickens County, South Carolina.

24. "Operational Easements" has the meaning set forth in Section 5.

25. "Operational Term" means the period during which the Facility is generating and delivering Steam as such term(s) are defined in the SSPA, commencing upon the Commercial Operation Date for the Facility and terminating upon expiration or earlier termination as provided herein in Section 2.1.2.

26. "Landlord" has the meaning set forth in the Preamble.

27. "Landlord Easements" has the meaning set forth in Section 5.

28. "Landlord Events of Default" has the meaning set forth in Section 13.3.

29. "Landlord's Property" means all premises other than the Site and Easement Areas that are owned or leased by Landlord or its Affiliates and at which the Steam will be used or through which the Steam will be delivered.

30. "Landlord's Parties" means Landlord, its officers, directors, partners, members, affiliates, lenders, employees, shareholders, attorneys, lessees (other than Tenant), sublessees, licensees, invitees, contractors, subcontractors, consultants, agents, trustees and any of their respective successors and assigns.

31. "Landlord Utilities" has the meaning set forth in Section 5.

32. "Losses" has the meaning set forth in Section 12.1(a).

33. "Manual" has the meaning set forth in Section 9.2(b).

34. "OSE" has the meaning set forth in Section 9.2(b).

35. "Party" or "Parties" means Landlord and/or Tenant, as applicable.
36. "Permitted Exceptions" has the meaning set forth in Section 18.1.
37. "Person" means any individual, corporation, partnership, limited liability company, joint venture, association, joint stock company, trust, estate, unincorporated organization or other business entity, or any governmental authority.
38. "Release" means any release, pumping, pouring, emptying, injecting, escaping, leaching, dumping, seepage, spill, leak, flow, discharge, disposal or emission of a Hazardous Material whether on, under or migrating to or from the property of any Party.
39. "Site" means that certain land located in Pickens County, South Carolina, as more particularly shown and described on Exhibit A attached hereto.
40. "SSPA" means that certain Steam Supply and Purchase Agreement dated February 2, 2017 between Tenant, as "Seller", and Landlord, as "Buyer."
41. "State" has the meaning set forth in Section 10.1(b).
42. "Tenant" has the meaning set forth in the Preamble.
43. "Tenant Events of Default" has the meaning set forth in Section 13.1.
44. "Tenant's Force Majeure Notice" has the meaning set forth in Section 2.2.1.
45. "Tenant's Force Majeure Termination Notice" has the meaning set forth in Section 2.2.1.
46. "Tenant's Parties" means Tenant, its officers, directors, partners, members, affiliates, lenders, employees, shareholders, attorneys, lessees, sublessees, licensees, invitees, contractors, subcontractors, consultants, agents and any of their respective successors and assigns.
47. "Term" has the meaning set forth in Section 2.1.2.
48. "Title Policies" has the meaning set forth in Section 18.1.
49. "Transfer" means a transfer or conveyance of Landlord's interest in (i) the Site, (ii) the Easements and/or (iii) this Ground Lease.
50. "Utilities" means the services and related improvements, equipment and facilities necessary for the operation of the Facility, including, but not limited to, natural gas, electrical power, water, storm water, sanitary sewer, roads, telephone and telecommunication services, improvements, equipment and facilities.