STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH DOCKET NO. G-9, SUB 728

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of () Application of GESS International North () Carolina, Inc., for Approval to Participate in () Pilot Program in Docket No. G-9, Sub 698, () And for Approval of Receipt Agreements ()

FIRST SUPPLEMENTAL AND AMENDED APPLICATION OF GESS INTERNATIONAL NORTH CAROLINA, INC.

Pursuant to North Carolina Utilities Commission ("Commission") Rule RI-5 and the Commission's Order Approving Appendix F and Establishing Pilot Program in Docket No. G-9, Sub 698 issued on June 19, 2018 (the "Appendix F Order"), GESS International North Carolina, Inc. ("GESS" or the "Applicant") herewith supplements and amends its original application for approval to participate in the pilot program created by the Appendix F Order ("the Application"). This filing supplements with updated information and amends and replaces completely the original Application of GESS in this Docket to address concerns raised by Piedmont Natural Gas Company, Inc. ("Piedmont") regarding that original Application.

GESS respectfully requests that the Commission expeditiously approve the participation of GESS and its proposed portfolio of five (5) digester facilities, as described herein, in the pilot program, with such approval conditioned on the later filing and approval of the final form of the interconnection agreements ultimately agreed upon by GESS and Piedmont. In support of this Supplemental And Amended Application, GESS submits the following to the Commission.

THE APPLICANT AND THE APPLICATION

1. GESS is a North Carolina domestic corporation with its principal place of

business in Raleigh, North Carolina.

2. Correspondence in connection with this Supplemental and Amended

Application should be sent as follows:

GESS International North Carolina, Inc. c/o Mr. Shaun Lee 3700 National Drive, Suite 100 Raleigh, NC 27612 (805) 334-6777 shaun.lee@gessinternational.com

with a copy to Counsel for the Applicant as follows:

Joseph W. Eason NELSON MULLINS RILEY & SCARBOROUGH LLP 4140 ParkLake Avenue. Suite 200 Raleigh, NC 27612 (919) 329-3807 joe.eason@nelsonmullins.com

Applicant and its Counsel agree to electronic service.

3. The Commission issued its Appendix F Order on June 19, 2018, in Docket No. G-9, Sub 698. Subject to the Commission's approval of this Application for pilot plan participation, the execution and approval of the final Receipt Agreements to be reached with Piedmont, and the disposition of GESS's previously filed Request for Declaratory Rulings as to "public utility" status and other issues, GESS plans to sell and deliver to Duke Energy Carolinas, LLC, "for itself and as agent for and on behalf of Duke Energy Progress, LLC" ("DEC" and "DEP", respectively), a portion of its Alternative Gas, as defined in the Appendix F Order, p.1, note 1, following the construction, testing and

commercial operation of five (5) proposed anaerobic digester plants in five (5) different counties of the State.

4. GESS is committed to meeting the Commission's standards for pilot plan participation as stated in the Appendix F Order.

5. GESS is informed and believes that DEC and DEP are existing customers of Piedmont and are likely to use the swine waste-based Alternative Gas to generate electric power in connection with meeting the State's Renewable Energy Portfolio Standards. GESS also plans to sell the associated Environmental Attributes to these purchasers of the Alternative Gas.

6. Applicant, through affiliates, has applied for Receipt Agreements with Piedmont for three injection points on the pipelines of Piedmont to serve five (5) biodigester plants being developed by the Applicant as described herein. The final form of the Receipt Agreements with Piedmont have not yet been agreed upon. The Applicant seeks approval to participate in the pilot program as requested herein, conditioned on the later filing and approval of the final Receipt Agreements reached between Piedmont and the Applicant.

7. GESS has informed Piedmont of its intent to file this Application and provided a copy of same prior to its filing and has received no response to its filing.

8. GESS has informed DEC and DEP of its intent to file this Application and provided a copy of same prior to its filing and has received no objections to its filing.

SUMMARY OF PROPOSED PLANTS AND OPERATIONS

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9. GESS proposes to construct digester facilities in Bladen County, Columbus County, Robeson County, Union County and Wilson County, North Carolina. All five plants will utilize 500,000 MMbtu closed-form anaerobic digesters obtained from Biogest® Digestor Systems, together with a scrubber system that removes up to 99% of impurities, producing a biogas intended to meet or exceed the standards for purity and temperature in Appendix F. To facilitate efficient operations, each plant also will have separate storage facilities for the biogas and other digestate by-products of the GESS plants to allow for on-site storage of each for varying periods of time.

10. Because the digester plants will be installed using a standard, consistent footprint for construction and installation based on numerous systems already installed and in service worldwide. GESS expects the time from commencement of construction to full biogas production to be approximately sixteen (16) months or less. GESS currently estimates that it will invest approximately \$33 million in constructing each digester plant location.

11. Project-specific information as to each of the five (5) digester plants is set out below, including for each plant the site location and an associated location exhibit, and the number of projected post-construction jobs required for on-going operations.

- a. Plant: Bladen County Green Energy Biogas Park Location: Bladenboro (see Exhibit 1) Locally-Based Jobs: 19 Full-Time
- Plant: Columbus County Green Energy Biogas Park Location: Clarendon (see Exhibit 2) Locally-Based Jobs: 19 Full-Time
- c. Project: Robeson County Green Energy Biogas Park #1 Location: Orrum (see Exhibit 3)

Locally-Based Jobs: 19 Full-Time

- d. Project: Union County Green Energy Biogas Park Location: Monroe (see Exhibit 4) Locally-Based Jobs: 18 Full-Time
- e. Project: Wilson County Green Energy Biogas Park Location: Stantonsburg (See Exhibit 5) Locally-Based Jobs: 18 Full-Time

Once at full production, each plant is projected to produce sufficient Alternative Gas to fill four (4) gaseous tanker trucks per day, containing roughly 1400 Mcf of scrubbed, cleaned, and pressurized, predominantly swine-based biogas.

12. The GESS plants will **not** be physically interconnected to the gas pipelines of Piedmont or any other pipeline operator. Each plant will have on-site facilities that allow for the pressurization of the gaseous biogas output for on-site storage or injection into pressurized tank trailers, and separate facilities for the pumping and storage of the remaining digestate output. Both outputs can be safely stored and transported in commercially available tank trailers already in use on a daily basis on the public roads of this State.

13. Through its affiliates, GESS has obtained fifteen-year lease agreements, with three optional five-year extensions, for each of the five digester plants. Assuming construction can commence by or before the second quarter of 2019, GESS forecasts that all of the five (5) projects will be able to achieve full production of Alternative Gas during the second quarter of 2020.

14. With respect to "in-bound" feed stock, GESS or one of its affiliates will handle and manage all manure pick-up and delivery to the facilities of GESS from the

waste sources. GESS will oversee the gathering, storage, transportation, weighing of trucks and loads, and bio-security activities, including wheel washing systems and tanker spraying systems at each site (including capture and handling of wash-wastes). The "green" biomass feed stock will be delivered by participating farmers using a separate entrance to the facilities of GESS, for deposit into a holding area. GESS personnel will be responsible for moving "green" biomass from the holding area to each digester.

15. Alternative Gas will be injected into Piedmont pipelines at three specific injection sites. Alternative Gas from the digester plants in Union County and Wilson County will be injected into the Piedmont system at injection points in Union County and Wilson County, respectively. Alternative Gas from the digester plants in Bladen County, Columbus County and Robeson County will be injected into the Piedmont system at a single injection site located in Bladen County.

16. GESS does not intend to tender for injection into Piedmont's system physical deliveries or transactions that would violate Piedmont's applicable tariffs or Appendix F, or that would involve potential interstate sales that may affect the current regulation of Piedmont or the Piedmont pipeline system.

17. Piedmont has provided GESS with boundary maps to help GESS identify three proposed injection points near Piedmont's pipelines. Exhibits 6 through 8 are the boundary maps provided by Piedmont within which the injection sites must be located in Bladen County (Exhibit 6), in Union County (Exhibit 7), and in Wilson County (Exhibit 8). GESS has provided Piedmont with proposed injection sites located within the boundaries shown on these Exhibits and with other related information for evaluation by Piedmont, but has received no response from Piedmont with regards to these proposed injection points as of the date of this filing.

REQUEST FOR PILOT PROGRAM APPROVAL

18. The Commission's Appendix F Order created a pilot program for a period of three (3) years during which Piedmont will report to the Commission "regarding the impact of Alternative Gas on its system operations and, ultimately its customers." Order, p. 5.

19. The Commission stated in its Appendix F Order that "[two previously conditionally approved Alternative Gas] projects shall be allowed to participate in the pilot program and the additional Alternative Gas Suppliers shall be allowed to participate in the pilot program upon a showing to the Commission that any such project will aid in the information and data sought to be gathered through the pilot program." Order, p. 17. The Appendix F Order also provided that "Piedmont and/or other Alternative Gas suppliers may apply to the Commission to participate in the pilot program; however, it must be demonstrated to the Commission that such additions will be useful in gathering information and data sought by Commission." Order, p. 5. By its Order in Docket G-9, Sub 726, entered on August 27, 2018, the Commission conditionally approved a third participant in the pilot program.

20. Obtaining authority to participate in the Piedmont Alternative Gas pilot project implemented by this Commission is a precondition to the timely construction and operation of the digester plants that GESS proposes to finance, build and operate.

21. For several reasons, allowing GESS to deliver Alternative Gas via the pipelines and facilities of Piedmont to DEC/DEP will provide useful data and information to the Commission, and supports approval of GESS's application for participation in the Pilot Program.

22. First, due to the relatively short time for achieving commercial operation, participation of the GESS plants in the pilot program will allow the collection of a larger volume of biogas-related data to begin sooner during the projected three-year study period of the pilot program.

23. Second, approval of the deliveries of Alternative Gas produced by GESS for participation in the pilot program will produce data and information from a wider geographical range of sources because the three points of injection are located in different parts of the State.

24. Third, the GESS digester plants will use feedstock blends of predominately swine-based manure and limited "green" agricultural waste that will provide information and data from sources that are not currently expected to be captured by the approved participants in the pilot program or their selected feed stocks.

25. The Appendix F Order states that participants in the pilot program must agree that its delivery agreements remain subject to any revisions to Appendix F that may be made by the Commission, as well as any applicable amendments to the Commission's Rules and Regulations. Order, pp. 2-3. GESS consents to approvals subject to these conditions.

26. For these reasons, deliveries of Alternative Gas from the proposed GESS plants are likely to generate useful data and information that is qualitatively and quantitatively distinct from the data set arising from the previously approved participants, and supports approval of this Application for authority to participate in the pilot program.

OTHER POLICY CONSIDERATIONS

27. In addition to the usefulness of the GESS projects in gathering information and data sought by the Commission for purposes of the pilot program, several other public policy reasons also support allowing Alternative Gas from GESS's plants to participate in the pilot program.

28. First, approval will assist the efforts of DEC and DEP to meet the State's Renewable Energy and Energy Efficiency Portfolio Standards, N.C. Gen. Stat. § 62-133.8, thereby promoting the policy of the State to encourage generation of renewable electric energy.

29. Second, the projects proposed by GESS will provide substantial capital investments and locally-based jobs in each of the five proposed plant locations, and the economic benefits resulting from the purchase of waste-product feed stocks by GESS will be shared by multiple suppliers.

30. Finally, GESS has expended substantial time and resources in locating the sites for its proposed digester plants and the injection facilities, in developing terms and conditions for its Alternative Biogas Purchase Agreements, and in engaging in other development activities. Delaying commencement of construction of the digester plants would be financially detrimental to GESS, and would also be a detriment to

subcontractors, vendors and other businesses in North Carolina likely to benefit from the investments that GESS intends to undertake

31. Accordingly, GESS respectfully requests the expeditious approval of this Application. As the Commission stated in the Appendix F Order, at p.4, if use of the natural gas distribution system "can be done while holding natural gas customers harmless, then every effort should be made to accommodate interconnections with Alternative Gas providers."

CONCLUSION

For all of these reasons, GESS respectfully requests that the Commission find and conclude that allowing deliveries of Alternative Gas from GESS to participate in the pilot program as described herein will be useful in gathering information and data sought by the Commission for purposes of the pilot program, and expeditiously approve pilot plan participation for injections of Alternative Gas from the five plants proposed by GESS in accordance with and subject to such conditions as described in this Commission's orders. Respectfully submitted, this the

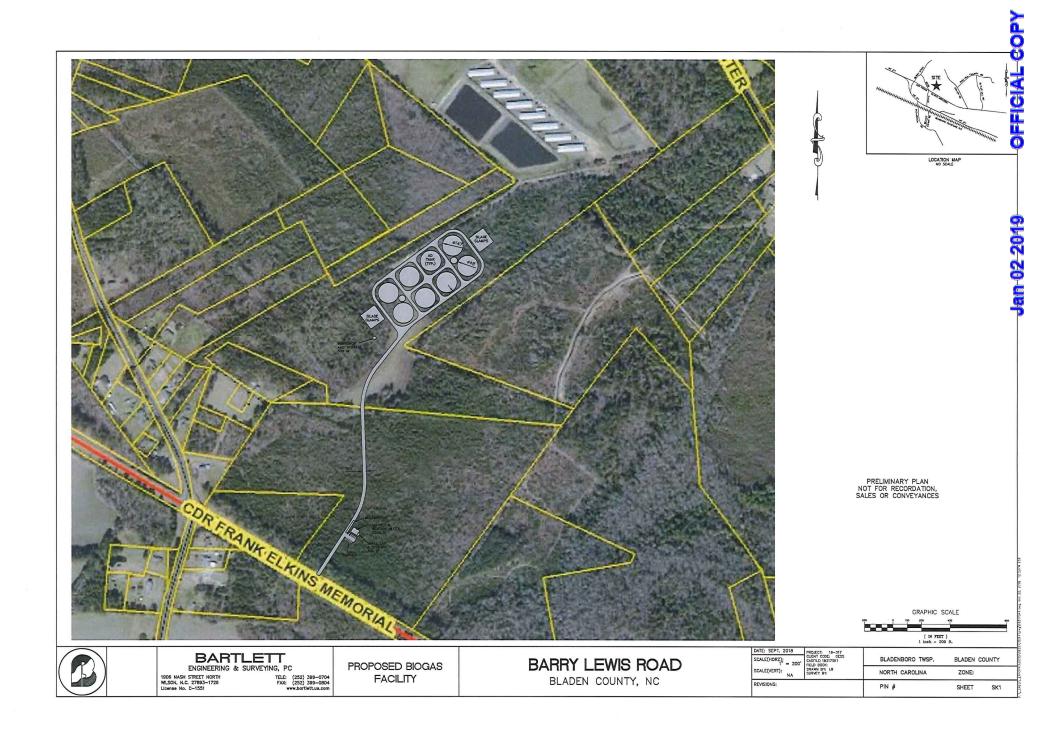
NELSON MULLINS RILEY & SCARBOROUGH LLP

Joseph W. Eason 4140 ParkLake Avenue, Suite 200 Raleigh, NC 27612 Telephone: (919) 329-3807 joe.eason@nelsonmullins.com

Attorneys for GESS International North Carolina, Inc.

PLANT: BLADEN COUNTY GREEN ENERGY BIOGAS PARK

LOCATION: BLADENBORO Jan 02 2019



OFFICIAL COPY

Jan 02 2019

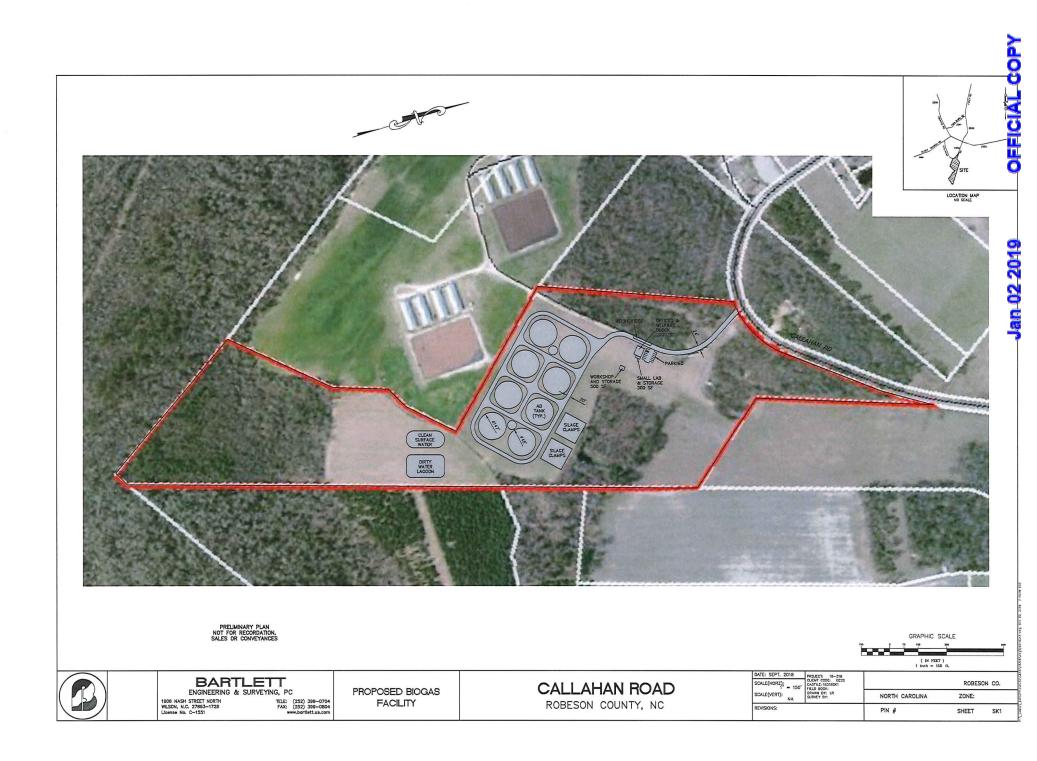
PLANT: COLUMBUS COUNTY GREEN ENERGY BIOGAS PARK

LOCATION: CLARENDON



PLANT: ROBESON COUNTY GREEN ENERGY BIOGAS PARK

LOCATION: ORRUM



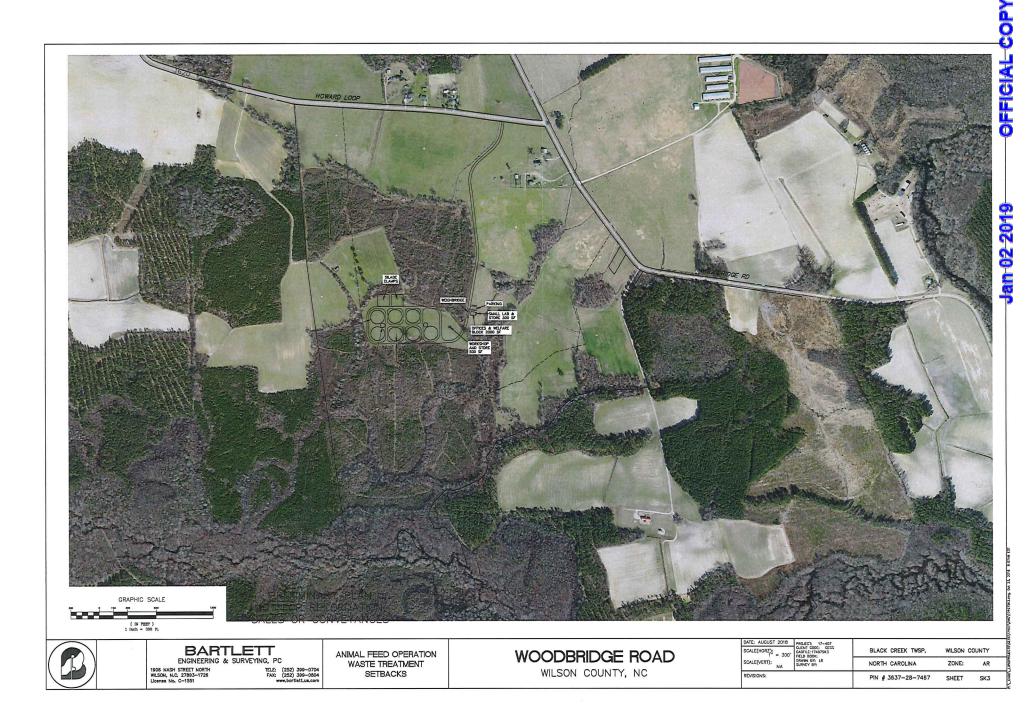
PLANT: UNION COUNTY GREEN ENERGY BIOGAS PARK

LOCATION: MONROE



PLANT: WILSON COUNTY GREEN ENERGY BIOGAS PARK

LOCATION: STANTONSBURG Jan 02 2019



BLADEN COUNTY

	14 C
STNAME	NC
STFIPS	37
CNTYNAME	Bladen
CNTYFIPS	017
STCNTYFIPS	37017
GNISID	1,026,336
PARNO	0269176082
NPARNO	37017 0269176082
ALTPARNO	5335
PARUSECODE	
PARUSEDESC	VACANT RURAL
PARUSEDSC2	
PARUSECD2	
STRUCT	N
STRUCTNO	0
STRUCTYEAR	0
PARVALTYPE	Assessed
IMPROVVAL	0.00
LANDVAL	8,100.00
PARVAL	8,100.00
OWNTYPE	
OWNNAME	RUSS VICTOR DARRELL ETUX RUSS CHERYL
OWNFRST	
OWNLAST	
SUBSURFOWN	
SUBOWNTYPE	
MAILADD	1049 MCKINAN ROAD
MADDRNO	
MADDSTNAME	
MADDPREF	
MADDSTR	
MADDSTTYP	
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MUNIT	
MCITY	CLARKTON
MSTATE	NC
MZIP	28433
SITEADD	BUTLER MILL RD
SADDNO	
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REVDATETX	
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SOURCEAGNT	Bladen County Assessor
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RECAREATX	13.75
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UNION COUNTY

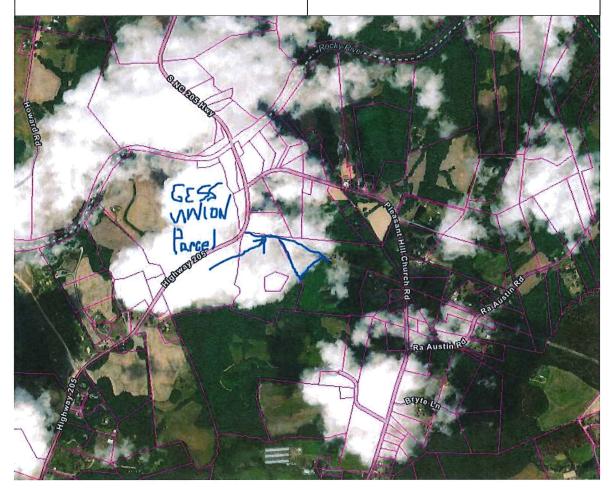
Parcel Centroids: Union County Parcel for Receipt Station/Injection Point GESS International:

Parcel Centroids: ROWELL JUANITA KAY

STNAME	NC
STFIPS	37
CNTYNAME	Union
CNTYFIPS	179
STCNTYFIPS	37179
GNISID	1,008,590
PARNO	01084025
NPARNO	37179_01084025
ALTPARNO	01084025
PARUSECODE	01004020
PARUSEDESC	RES/AG ACREAGE
PARUSEDSC2	FARM/RESIDENTIAL
PARUSECD2	DWELLING
STRUCT	Y
STRUCTNO	0
STRUCTYEAR	
	1,999
PARVALTYPE IMPROVVAL	Assessed
	29,900.00
	210,520.00
PARVAL	240,400.00
OWNTYPE	
OWNNAME	ROWELL JUANITA KAY
OWNFRST	
OWNLAST	
SUBSURFOWN	
SUBOWNTYPE	
MAILADD	301 OAK FOREST CIRCLE
MADDRNO	
MADDSTNAME	
MADDPREF	
MADDSTR	
MADDSTTYP	
MADDSTSUF	
MUNIT	
MCITY	MATTHEWS
MSTATE	NC
MZIP	28104
SITEADD	7625 PLEASANT HILL CHURCH R
SADDNO	7625
SADDSTNAME	
SADDPREF	
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OWNNAME2	Δ.
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WILSON COUNTY

Parcel Centroids: Wilson County Receipt Station Injection Site Parcel from Boundary Maps for GESS Intl Wilson Biogas Project:

Parcel Centroids: BYNUM EDWIN COUNCIL JR

STNAME	NC
STRAME	
	37
CNTYNAME	Wilson
CNTYFIPS	195
STCNTYFIPS	37195
GNISID	1,008,596
PARNO	3658-12-7421.000
NPARNO	37195_3658-12-7421.000
ALTPARNO	3658-12-7421.000
PARUSECODE	01
PARUSEDESC	RESIDENTIAL
PARUSEDSC2	RURAL HOMESITE
PARUSECD2	
STRUCT	Y
STRUCTNO	0
STRUCTYEAR	0
PARVALTYPE	Assessed
IMPROVVAL	5,760.00
LANDVAL	94,577.00
PARVAL	100,337.00
OWNTYPE	
OWNNAME	BYNUM EDWIN COUNCIL JR
OWNFRST	
OWNLAST	
SUBSURFOWN	
SUBOWNTYPE	
MAILADD	PO BOX 250
MADDRNO	10 00/ 230
MADDSTNAME	
MADDPREF	
MADDSTR	
MADDSTTYP	
MADDSTSUF	
MUNIT MCITY	
	STANTONSBURG
MSTATE	NC
MZIP	27883-0250
SITEADD	CARRIE RD
SADDNO	42352
SADDSTNAME	
SADDPREF	
SADDSTR	0
SADDSTTYP	RD
SADDSTSUF	
SUNIT	
SCITY	
SSTATE	NC
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Wilson County Assessor

BYNUM WALTER HUBERT

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SALEDATETX

GISACRES

REVDATETX REVISEYEAR SOURCEAGNT

MULTISTRUC

SUBDIVISIO RECAREATX

REVISEDATE

RECAREANO TRANSFDATE SALEDATE OWNNAME2

PRESENTVAL

MAPREF