

434 Fayetteville Street Suite 2800 Raleigh, NC 27601

November 1, 2016

Ms. Paige Morris, Deputy Clerk North Carolina Utilities Commission 430 N. Salisbury Street Raleigh, NC 27603

RE: NTE Carolinas II, LLC

Affidavit of Michael Green Docket No. EMP-92, Sub 0

Dear Ms. Morris:

In support of NTE Carolinas II, LLC's Application for a Certificate of Public Convenience and Necessity for Merchant Plant, we are herewith electronically submitting, in the above-referenced docket, the Affidavit of Michael Green.

If you have any questions or comments regarding this filing, please do not hesitate to call me.

Thank you in advance for your assistance.

Very truly yours,

/Karen M. Kemerait

skb

Enclosures

cc: Christopher J. Ayers, Esq. Antoinette Wike, Esq.

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. EMP-92, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of NTE Carolinas II, LLC, for Certificate of Public Convenience and Necessity to Construct a Natural Gas-Fired Electric Generating Facility in Rockingham County, North Carolina

AFFIDAVIT OF MICHAEL GREEN

- 1. I, Michael Green, after being first duly sworn, depose and say the following.
- 2. I am presently employed as Vice President for Development for NTE Carolinas II ("NTE"), the Applicant in this proceeding. NTE appreciates the efforts of the North Carolina Utilities Commission ("Commission"), the Public Staff, the intervenor NCWARN, and the sixteen witnesses and residents who took their time to express their comments and concerns regarding the Reidsville Energy Center facility ("Facility") at the public hearing held on Tuesday, October 25, 2016, at the Rockingham County Courthouse in Reidsville. We value the public participation, and appreciate the participation of those who spoke in favor of the Facility and its many benefits, as well as those who expressed sincerely-held questions and concerns. In addition, after the hearing, I spoke individually with some of the people who had specific questions.
- 3. As we have in our ongoing projects in Middletown, Ohio and Kings Mountain, NC, NTE prides itself on listening and fully understanding any and all issues that our future neighbors may have and its pledge to work diligently to resolve those concerns to the best of our ability. Therefore, I would like to address the questions and concerns that were raised at the

public witness hearing or afterwards, and I would also like to repeat NTE's offer to meet with those who would like a more personal briefing so that we may discuss our plans and explain how those plans might affect the resident individually. I have grouped the questions and concerns that have been raised by topic, and have responded to the questions and concerns below.

IN GENERAL, OVERSIGHT BY OTHER REGULATORY AGENCIES:

4. As a preliminary matter, I want to mention that an electric generation facility such as the one proposed by NTE is subject to the regulatory jurisdiction of many local, state, and federal agencies and bodies (in addition to the NC Utilities Commission), each of which has requirements and or permits applicable to various aspects of the facility. NTE must comply with all of those regulations in order to develop, finance, construct, and operate the Facility. Each of the governmental agencies and bodies has specific areas and issues that it regulates.

WATER DRAWN FROM THE DAN RIVER/ROUTES PROPOSED FOR PIPING/QUALITY OF WATER RETURNED (Compliance with NC Department of Environment and Natural Resource, Division of Environment Quality):

- 5. As stated at the hearing, the County will permit, own, operate and maintain both the supply lines that bring water to NTE's Facility, as well as the discharge lines returning water from the Facility to the river. The County will be required to comply with all federal, state and local permitting requirements to ensure that the locations of the intake and discharge structures are compatible with the river, that the route of the piping is acceptable, and that the Facility will comply with the County noise ordinance for any noise generated by the intake pumps.
- 6. The NTE Facility will need, on average, approximately 1.7 million gallons per day (mgd) of process water on an annual basis. It will return approximately 15 to 20% of the water supplied to the Facility. The remainder evaporates during the Facility cooling process as pure water into the atmosphere; but it, of course, stays in the hydrologic cycle. A letter from the

County that addresses the basic plans for this water infrastructure is attached hereto as <u>Appendix</u> <u>A</u>. A few of the key points are summarized as follows:

- The County is sizing the infrastructure to meet the peak demand of the Facility, potential additional customers in the future, and sufficient engineering margin (designing for approximately 5 mgd). However, during normal operation the demand of the Facility will be much less and NTE's average demand will be the approximately 1.7 mgd, noted above.
- The County's plans will not affect the plans for the proposed County park that will also be located along the Dan River.
- The addition of chlorine to the water after it is removed from the river is done to control bacterial growth in the pipelines. The chlorine is removed prior to the water returning to the river. Standards prohibit the addition of any other chemicals that result in detectable concentrations of any priority pollutant being sent to the river.

NOISE LEVELS AT THE FACILITY (Compliance with local noise ordinance):

7. NTE is taking all necessary steps to ensure that noise levels will have minimal effect on our neighbors. The "power block" of the NTE Facility is located on approximately 20 acres, and it is located well within the 170-acre site we have optioned. NTE has intentionally optioned much more acreage than is needed for the physical power plant in order to provide appropriate buffers for the neighbors. Based on the current layout, at the nearest point, any equipment that would emit noise is located no closer than 2,000 feet from Highway 65 and 1,600 feet from New Lebanon Church Road. One reason that NTE recently entered into an option for an additional 74 acres (to obtain the total 170 acres) is to ensure that we have minimal impact on ambient noise levels. NTE will meet all applicable County noise ordinances currently in effect.

<u>HISTORICAL AND ARCHAEOLOGICAL SIGNFICIANCE</u> (Compliance with SHPO review and compliance):

- 8. NTE has hired expert consultants who have already performed the archeological, historical and cultural resource reviews and field surveys. Those results have been provided to the State Historic Preservation Office ("SHPO") for review. The site was recommended as ineligible for inclusion on the National Register of Historic Place ("NRHP"), and no further work was recommended. SHPO concurred with these recommendations, and further agreed that no sites deemed eligible for the NRHP would be impacted by the proposed undertaking.
- 9. On October 26, 2016, NTE shared the archeological assessments and SHPO's correspondence and concurrence with the Dan River Basin Association ("DRBA"), and a member of the DRBA spoke at the public hearing. We are also in the process of setting up meetings with DRBA representatives to further discuss how NTE and DRBA can work together as the project progresses. Let me note that we are very willing to follow a similar process with any organization or individual citizen who has questions or comments about the Facility.

TRAFFIC (Compliance with NCDOT requirements):

10. NTE has met with NC Department of Transportation ("NCDOT"), and will continue to work with NCDOT, Division 7, to ensure that all NCDOT requirements and traffic safety are met. One of the reasons NTE is purchasing the additional 74 acres to the north of the actual power block location is to provide more options for a safe driveway location.

JOBS:

11. The Engineering, Procurement, Construction ("EPC") contractor will be a major contractor. Gemma Power Systems ("Gemma") was awarded the EPC contract for NTE Energy's Kings Mountain, NC facility ("KMEC"). NTE required Gemma to hold a job fair in the community to gather resumes of residents in the host community and surrounding

communities who can offer their skills to the project construction. We intend to repeat this process in Rockingham County for our Facility. As an example, local Cleveland County subcontractors and suppliers were vetted by GEMMA and were awarded the following contracts, which significantly enhanced the local economy:

Local KMEC Subcontractors:

- Grading / Earthwork;
- Rebar / Forming / Concrete Placement;
- Tank Fabrication / Erection;
- Building Contractor (Admin / Electrical / Water Treatment Bldgs);
- Switchyard Construction; and
- Surveying.

Local KMEC Suppliers:

- Concrete Batch Plant;
- Rebar Fabrication;
- Gravel Quarry;
- Trucking Company (gravel);
- Office Equipment (computers, printers, etc.);
- Office Furniture; and
- Meal Catering (daily).
- 12. In addition to the several hundred jobs represented by these sub-contractor awards, Gemma itself has already hired more than 40 people from the community and surrounding area for the office and craft positions. The 40 people whom Gemma has already hired are in addition to the subcontractors and suppliers that Gemma has awarded contracts. The number of local Gemma hires will increase as construction staffing increases next year.

EFFECT ON PROPERY VALUES WITH THE ADDITION OF THE FACILITY (Compliance with local zoning ordinance /Special Use Permit requirements):

13. On July 11, 2016, the Rockingham County Planning Board conducted a quasi-judicial public hearing on the requested Special Use Permit for the facility (Special Use Permit Case # 2016-006). During the course of that hearing, it was noted that the Facility will be

located next to an existing 874 MW power plant (the Duke Rockingham plant) that has been there for about 20 years. In addition, there is a large compressor station on the Williams Gas Pipeline approximately one mile to the north of our Facility. As required by the Rockingham County Unified Development Ordinance, the Board made the following findings -- based upon the competent, material, and substantial evidence presented under oath at the hearing -- in order to grant the Special Use Permit:

- (a) That the use or development is located, designed, and proposed to be operated so as to maintain or promote the public health, safety, and general welfare;
- (b) That the use or development complies with all required regulations and standards of this ordinance [Rockingham County Unified Development Ordinance] and with all other applicable regulations;
- (c) That the use or development is located, designed, and proposed to be operated so as to maintain or enhance the value of contiguous property; and
- (d) That the use or development conforms with the general plans for the land use and development of Rockingham County as embodied in the Unified Development Ordinance and in the Rockingham County Land Use Plan.
- 14. A motion to approve the permit, made by Planning Board Commissioner Timothy Wyatt, specifically recited these four findings of fact as the basis of approval. The motion to approve was seconded by Commissioner Ann Cunningham, and the seven-member Planning Board voted unanimously to approve the permit. The Special Use Permit for the Facility, as approved by the Rockingham County Planning Board, is attached hereto as Appendix B.

FURTHER THE AFFIANT SAYETH NOT.

This the 1st day of November, 2016.

Michael Green

Sworn to and subscribed before me this the _/_ day of November, 2016.

My commission expires: 12/13/19

Notary Public Wake County



ROCKINGHAM COUNTY

Engineering & Public Utilities

Dear Mr. Green.

I am offering this letter to provide clarification on several statements that were made during the North Carolina Utilities Commission's public witness hearing on Tuesday, October 25, 2016 with regards to the water and wastewater infrastructure systems that Rockingham County will be designing, permitting, owning, operating and maintaining to service NTE Energy's Reidsville Energy Center Facility (the "Facility").

During the hearing, several individuals raised questions about the construction and operation of the infrastructure systems. These questions fell into four main categories: volume of water intake, volume of wastewater flow and constituents contained within the wastewater flow, noise associated with the pumping station, and the route of the water and wastewater pipe lines between the Dan River and the Reidsville Energy Center Facility. The County has not begun the final design of this infrastructure, but has performed its due diligence to ensure the viability of the plans. I have addressed each of those items below.

Water Intake

- NTE has provided the preliminary water intake requirements to the County for use as the basis of the design. These values are reported below.
- o The intake structure and pumping station will be designed for a maximum capacity of approximately 3,500 gallons per minute (gpm) or five (5) million gallons per day (mgd) if the station is operated at its maximum capacity for 24 hours. The water infrastructure is designed to meet a maximum intake flow condition at the Facility of approximately 3,000 gpm for a maximum of eight hours, with margin. However, NTE has reported that based on the preliminary design, the water intake during normal operation will range between 1,000 gpm and 2,300 gpm, with short periods of demand up to 2,500 gpm or 3.6 mgd on the very hottest days of the year.
- The water demand of the Facility will vary with ambient temperature throughout the year. The average annual water intake will be approximately 1,200 gpm or 1.7 mgd.
- o The North Carolina Department of Environmental Quality has indicated that the low flow statistic for the Dan River the lowest 7-day average flow that occurs on average once every 10 years is 162 cubic feet per second (cfs) or approximately 105 mgd. The maximum intake of the Facility, under normal operating conditions, is approximately 3.4

- percent of the low flow condition of the Dan River. However, the median flow of the Dan River is approximately 812 (cfs) or approximately 525 mgd, of which the maximum intake is 0.7 percent.
- The design of the intake structure and intake flows will meet all requirements of section 316(b), 401 and 404 of Title 40, Code of Federal Regulations (40 CFR), as reviewed and administered by the North Carolina Department of Environmental Quality and the United States Army Corps of Engineers. Applications to these agencies will be filed after design of the systems is complete. Applications are expected to be filed by the first quarter of 2017.
- Wastewater discharge
 - Approximately 15-20% of water supplied to the Facility will be discharged back to the Dan River. The remainder of the water will be evaporated in the cooling process of the Facility.
 - o The Facility which will discharge wastewater into the wastewater pipeline will be required to meet the effluent standards of 40 CFR, part 423. These standards prohibit the addition of cooling water chemicals that result in detectable concentrations of any priority pollutant in the cooling tower blowdown.
 - Although the cooling water may be chlorinated to mitigate bacteria growth and biofouling
 of heat exchange surfaces, unevaporated water discharge from the cooling tower will be
 de-chlorinated such that there will be no measurable concentration of chlorine in the
 discharge to the wastewater system.
- Noise associated with the pumping station
 - o The proposed new water intake and pumping station will be located at the County-owned site along Planter's Road. The pumping station will utilize quiet, electric motor driven pumps, within an enclosure that will further attenuate the limited noise associated with the pumps. The design and location of the pumping station will limit noise at the proposed ADA accessible overlook deck to undetectable levels. There will be no effect on the planned park.
- Route of pipelines
 - The pipelines are anticipated to use existing North Carolina Department of Transportation ("NCDOT") rights of way, as well as additional County land associated with the existing landfill. Where NCDOT rights of way or County land are not used, easements will be obtained by the County and any required studies would be undertaken at that time.

Please let me know if you require additional information.

Best regards,

Emni Tota

371 NC 65, Reidsville, NC 27320| PO Box 132, Wentworth, NC 27375

TELEPHONE: (336) 342-8104 | FAX: (336) 342-8240 | EMAIL: rtate@co.rockingham.nc.us



ROCKINGHAM COUNTY

GOVERNMENTAL CENTER

Departments of Planning, Inspection and Central Permitting

ROCKINGHAM COUNTY SPECIAL USE PERMIT GRANTED SUP #2016-006

SPECIAL USE GRANTED BY:

Rockingham County Planning Board

DATE OF PUBLIC HEARING:

July 11, 2016

APPLICANT:

NTE Energy

PROPERTY LOCATION:

NC Hwy 65

TAX PIN:

7954-03-31-6118 & 7954-00-41-9317

PRESENT ZONING DISTRICT:

Residential Agricultural

PROPOSED USE OF PROPERTY:

Public Utilities Facility

Having heard all the evidence and arguments presented at the hearing, the Board finds that the application is complete, that the application complies with all of the applicable requirements of ordinance for the development proposed, and therefore the application to make use of the above described property for the purpose indicated is hereby approved subject to all applicable provisions of the Ordinance and the conditions outlined below:

- 1. All development shall proceed in accordance with the site plan, including applicant submitted materials, and any changes may require a Site Plan Amendment.
- 2. The applicant is responsible for obtaining and complying with all required permits and approvals.
- 3. The applicant must follow all of the applicable requirements for the special use permit for Public Utilities Facilities, which are listed in the Rockingham County Unified Development Ordinance (page 135).
- 4. Prior to operation of the Public Utilities Facility, the applicant shall contact the North Carolina Department of Transportation to determine if a commercial driveway permit is needed. The applicant shall provide the Planning Department with a copy of the commercial driveway permit or written verification from the North Carolina Department of Transportation that a permit is not needed.

A written copy of this decision was filed with the Clerk to the Board of Commissioners on October 27, 2016 and mailed first class to the applicant on October 27, 2016. This is the 27th day of October, 2016.

Department of Planning and Building Inspections