

STATE OF RHODE ISLAND

DIVISION OF PUBLIC UTILITIES & CARRIERS Legal Section 89 Jefferson Boulevard Warwick, Rhode Island 02888 (401) 941-4500 (401) 941-9207 - Fax

September 13, 2023

Ms. Luly Massaro, Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, R.I. 02888

Re: Docket 23-05-EL

Dear Ms. Massaro:

Attached, please find the testimony of Michael Brennan, the Division's consultant for filing in Docket No. 23-05-EL.

Very Truly Yours, Maseur Margaret L. Hogan

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

RE: The Narragansett Electric Company d/b/a Rhode Island Energy Tariff Advice

Docket No. 23-05-EL

PREFILED DIRECT TESTIMONY OF

Michael W. Brennan, Consultant

On Behalf of Rhode Island Division of Public Utilities and Carriers

September 13, 2023

Prepared by: Michael W. Brennan 14460 Falls of Neuse Road, Suite 149-110 Raleigh, North Carolina 27614 (919) 219-2957

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Exhibit 1 - Resume for Michael W. Brennan

DIRECT TESTIMONY OF MICHAEL W. BRENNAN

1 I. INTRODUCTION

2 Q. PLEASE STATE YOUR NAME AND THE BUSINESS ADDRESS OF YOUR 3 EMPLOYER.

A. My name is Michael W. Brennan. I am a consultant for Gregory L. Booth, PLLC ("Booth,
PLLC"), mailing address 14460 Falls of Neuse Road, Suite 149-110, Raleigh, North
Carolina 27614.

7 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS MATTER?

8 A. I am testifying on behalf of the Rhode Island Division of Public Utilities and Carriers
9 ("Division").

10 Q. WOULD YOU PLEASE OUTLINE YOUR EDUCATIONAL BACKGROUND?

A. I graduated from North Carolina State University in Raleigh, North Carolina in 1992 with
 a Bachelor of Science degree in Civil Engineering and received a Master of Business
 Administration degree from Wake Forest University in 2000.

14 Q. PLEASE BRIEFLY DESCRIBE YOUR EXPERIENCE WITH ELECTRIC 15 UTILITIES.

A. I have worked in the electric utility industry since 2000. I was employed by Progress
Energy from 2000 to 2012 and Duke Energy from 2017 to 2019 in a multitude of positions.

- 18 Attached is my Curriculum Vitae Exhibit MWB-1. I have been actively involved in all
- 19 aspects of electric utility strategic and financial planning, utility investment analysis, public
- 20 policy, ratemaking, and renewable energy program management. I also have experience
- 21 advising clients on energy markets and renewable energy project development.

Q. HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT BEFORE THE RHODE ISLAND PUBLIC UTILITIES COMMISSION? A. Ves. I testified in various Panawahla Energy Growth Program Deslects (Deslect 50%)

- 3 A. Yes, I testified in various Renewable Energy Growth Program Dockets (Docket 5088,
 4 Docket 5202 and Docket 22-39-REG)
- 5 Q. HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT IN OTHER
 6 JURISDICTIONS?
- 7 A. No.
- 8

9 II. <u>PURPOSE OF TESTIMONY</u>

10 Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

11 A. On February 15, 2023, The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company") filed tariff advice to amend the Net Metering Provision and presented a 12 13 proposal for administration of Excess Net Metering Credits. The filing is in response to a 14 directive issued by the Rhode Island Public Utilities Commission ("Commission") in an 15 Open Meeting held on December 7, 2022 regarding the administration of the net metering 16 program. At that meeting, the Commission requested that the Company file a proposal to 17 recommend a go-forward approach for an annual reconciliation process for excess net 18 metering credits in accordance with Section II (5) of the net metering tariff. The purpose 19 of this testimony is to provide a summary of the Division's observations regarding the 20 Company's filing and to summarize the Division's recommendations to the Commission.

21 (

Q. WHAT DOES SECTION II (5) OF THE TARIFF REQUIRE?

A. This section requires the Company to perform an analysis of net metered accounts todetermine the volume of the renewable net metering systems generation that was credited

at the full value of a Renewable Net Metering Credit but should have been credited at the
 rate for an Excess Renewable Net Metering Credit.

3 Q. WHAT ISSUES OR COMPLICATIONS EXIST WITH IMPLEMENTING THE 4 REQUIREMENTS OF SECTION II (5)?

5 A. The analysis to determine the volume of credits that are Excess Renewable Net Metering 6 Credits relies on an enumeration of both the annual energy consumption of the net metering 7 customer in kWh and the annual generation from the net metering system in kWh. This 8 analysis and the administration of the reconciliation process is made difficult because the 9 Rhode Island Net Metering program does not require separate production and consumption 10 meters to be installed with net metering systems. As a result, for behind the meter systems 11 (which constitute most net metering systems), it is not possible to precisely determine both 12 the amount of energy consumption and the energy production on a monthly or annual basis. 13 The data that is readily available only measures net energy consumption, either positive or 14 negative in each period.

15

16 III. <u>REVIEW OF PROPOSED ANNUAL RECONCILATION PROCESS</u>

17 Q. DID YOU REVIEW THE FILING OF RHODE ISLAND ENERGY AS WELL AS

18 THE DATA REQUESTS OF THE COMMISSION AND OTHER INTERVENING

19 **PARTIES AS WELL AS THE COMPANY'S RESPONSE TO SUCH REQUESTS?**

20 A. Yes, I did.

21 Q. WHAT HAS THE COMPANY PROPOSED IN ITS FILING?

A. In summary, the Company has proposed a methodology to make reasonable estimates of
 energy consumption and energy production to support an annual reconciliation process that
 the Company believes meets the statutory requirements. The Company's filing includes

1		tariff changes that support this annual reconciliation process as well as other changes that
2		are intended to ensure that stand-alone, or remote, net metering facilities minimize the
3		annual volume of excess credits that are created and minimize the risk that these credits
4		remain with the host account, which often does not have sufficient load to use the credits.
5	Q.	CAN YOU ELABORATE ON THE PROPOSED METHODOLOGY?
6	A.	Yes. As briefly discussed above, the statutory definitions of Renewable Net Metering
7		Credits and Excess Renewable Net Metering Credits require the Company to determine
8		both the annual energy consumption by the net metering customer and generation of the
9		net metering system. Because the Company only records the net energy consumption at the
10		meter, this requires the Company to make an estimate of either energy generation or energy
11		consumption, or both. In short, this can be represented by a simple algebraic equation:
12		N = C - G, where
13		N = Net Consumption or Generation (a positive or negative value)
14		G = Generation from Net Metering System
15		C = Energy Consumption of Net Metering Customer
16		The calculation of Excess Net Metering Credits relies on the ratio of the values G and C,
17		specifically G / C. Because the Company only measures and records the Net Consumption
18		or Generation (N) each month, to calculate the Ratio G / C, one must also know either G
19		or C. For example, if one knows the value of G, one can calculate C as the sum N + G.
20		Likewise if one knows the value of C, one can calculate G as the difference C - N. The
21		Company is proposing to make estimates of annual Energy Consumption $(C)^1$ as the basis
22		for performing the reconciliation calculations. With the estimate of C, the Company can

¹ See RIE response to PUC 2-8

calculate the corresponding estimate of Generation (G) and appropriately determine the
 ratio of Generation to Consumption and thus the volume of Excess Net Metering Credits,
 including any amounts that exceed 125% of Consumption. This will then be used to
 calculate the appropriate billing charge, if any, to effect the reconciliation.

5 Q. HOW DO STAND ALONE SYSTEMS DIFFER FROM BEHIND THE METER 6 SYSTEMS?

7 Stand-alone (aka Community Remote Net Metering or Virtual Net Metering) systems A. 8 consist of a host account for the net metering system that typically has little to no load. 9 The energy generation and associated net metering credits are allocated to one or more 10 satellite accounts (these "eligible credit recipients" are accounts with load that apply the 11 allocated credits against their monthly bills). For stand-alone systems, the process of 12 determining and categorizing excess generation is much more straightforward as these 13 systems typically have a production meter measuring the system generation at the host site 14 as well as actual load data from the accounts receiving net metering credits. In other words, in these situations both G and C are known and measured on a monthly basis and do not 15 16 require any estimates of either consumption or generation. For these systems, any issues 17 related to inaccuracy due to assumed capacity factors for the solar facility or historical or 18 prospective estimated consumption are not relevant.

19 Q. DOES THE DIVISION SUPPORT THE PROPOSED CALCULATIONS TO 20 DETERMINE THE VOLUME OF EXCESS CREDITS AND TO BREAK THIS 21 DOWN FURTHER INTO CREDITS BETWEEN 100% AND 125%, AND THOSE 22 GREATER THAN 125%?

A. Yes, the Division believes that the Company has a means to make a reasonable estimate of
 monthly and annual energy consumption using historical data for the account prior to the

1 net metering system installation. In addition, the Company can separately estimate energy 2 generation from the net metering system based on the use of average capacity factors for 3 similar systems to check or validate the estimated consumption. Based on the Company's responses to data requests², it is clear that the Company expects to be able to utilize separate 4 5 estimates of generation as a means to validate the results of the estimated consumption 6 calculations. Furthermore, the total amount of generation in excess of consumption is not 7 in question, as this is precisely measured by the net meter. The estimates of consumption 8 are only important to determine what portion of the excess generation is within 100% and 9 125% of consumption and what portion of the excess in more than 125% of consumption. 10 HOW WILL THE DOLLAR AMOUNT OF THE FINAL BILLING CHARGES BE Q. 11 **DETERMINED?** For all Excess Renewable Net Metering Credits³ the billing charge rate on a \$/kWh basis 12 A. 13 will be determined using the difference between the weighted average of the Renewable Net Metering Credit and the Excess Renewable Net Metering Credit in effect during the 14 months the excess generation took place⁴. This rate, expressed in \$/kWh will then be 15 16 multiplied by the total volume of Excess Renewable Net Metering Credits (in kWh) 17 calculated using the methodology described above. This calculation results in a value that 18 is equivalent to the weighted average of the sum of the Distribution Charge (Dx), the 19 Transition Charge (Tx) and the Transmission Charge (T) during these months, as described

² See Company response to PUC 2-8 (d)

³ "Excess Renewable Net-Metering Credit" means a credit that applies to an eligible net metering system or community remote net-metering system for that portion of the production of electrical energy beyond one hundred percent (100%) and no greater than one hundred twenty-five percent (125%) of the renewable self-generator's own consumption at the eligible net-metering system site or the sum of the usage of the eligible credit recipient accounts associated with the community remote net-metering system during the applicable billing period.

⁴ See Company response to MAE-2-7 for an example of this calculation.

- 1 in the Company's tariff advice and detailed in the proposed Schedule C to the tariff. As 2 such, this billing charge does not incorporate any average of the Last Resort Service (LRS) 3 rate. For net metering systems that are sized to generate electricity in an amount that is 4 approximately equal to annual consumption, the majority of any excess credits will fall in 5 this bucket (i.e. between 100% and 125% of consumption). 6 For the portion of the net metering generation in excess of 125% of consumption, a second 7 billing charge per kWh will be calculated as the weighted average of the sum of the 8 Distribution Charge (Dx), the Transition Charge (Tx) and the Transmission Charge (T) 9 PLUS the LRS rate in effect during the months the excess generation took place. The total 10 \$/kWh rate will be multiplied by the volume of excess credits that are above 125% of 11 consumption to calculate the second billing charge. The sum of the two charges will be 12 assessed as a single Billing Charge to the net metering customer. 13 HOW WILL THE COMPANY APPLY ANY BILLING CHARGES RESULTING Q. 14 FROM THE RECONCILIATION PROCESS TO BEHIND THE METER 15 SYSTEMS? 16 A. The total billing charge that is calculated during the annual reconciliation process will be 17 applied as a charge on the billing cycle as soon as possible following the completion of the
- process. The Company identified two potential timelines for the CY 2022 reconciliation
 based on how these charges will be posted to the bill.

20 Q. HOW WILL THE COMPANY APPLY ANY BILLING CHARGES RESULTING 21 FROM THE RECONCILIATION PROCESS TO STAND-ALONE SYSTEMS?

A. The Company is proposing that any billing charges resulting from the annual reconciliation
 calculations for stand-alone systems will be charged to the net metering system host
 account. The host account will then be responsible for any true-up transactions with offtake

1		accounts based on contractual agreements among the parties with no involvement from the
2		Company.
3	Q.	DOES THE DIVISION SUPPORT THE CALCULATIONS OF THE BILLING
4		CHARGE?
5	A.	Yes, the Division supports the proposed approach to calculating the billing charge and
6		assessing those charges to customers. The Division believes that this approach is consistent
7		with the requirements of the net metering statute.
8	Q.	WHEN WILL THE COMPANY REFLECT THE IMPACTS OF THE ANNUAL
9		RECONCILIATION PROCESS IN THE NET METERING CHARGE?
10	А.	The Company is proposing that, in a typical year, the net metering charge will be adjusted
11		beginning in October and running through the following March. The adjustment will add
12		a separate component to the then-current net metering charge. This separate component
13		will also be a uniform per kWh charge. In this manner, the adjustment component to the
14		net metering charge will terminate at the same time that the base net metering charge
15		expires, just prior to the establishment of a new net metering charge for the subsequent
16		year. The reconciliation adjustment process will not result in any changes to the current
17		process for establishing the net metering charge annually as part of the Annual Retail Rate
18		Filing made on or around February 15th for rates to be effective April 1st through March
19		31st each year.
20	Q.	DOES THE DIVISION SUPPORT THE PROPOSED APPROACH TO
21		ADJUSTING THE NET METERING CHARGE TO REFLECT THE ANNUAL
22		RECONCILIATION?
23	А.	Yes, the Division supports this approach.

Q. DID THE COMPANY PROPOSE TO INITIALLY PERFORM THIS RECONCILIATION ON A SMALLER SUBSET OF NET METERING ACCOUNTS?

A. The Company originally proposed to establish a threshold of 25 kW system size to perform
what they termed a Phase 1 analysis. This threshold was established due to perceived
complexity in running the analysis for the large number of total net metering accounts (over
10,000 total accounts). The remaining accounts would be analyzed in a second Phase.

8 Q. HAS THE COMPANY MODIFIED THE APPROACH TO THE LIMITING 9 NUMBER OF ACCOUNTS TO RECONCILE?

10 A. After further review, and with the addition of a potential software solution to aid in the data 11 management and calculations, the Company now believes that the entire review process 12 can be achieved without the need for a two-phase approach.⁵ Pending review of the 13 resulting analysis, the Division supports inclusion of all accounts in the 2022 14 reconciliation. This would require an edit to the proposed new definition in the tariff of 15 the term "Eligible Reconciliation Pool" to remove the 25 kW constraint or elimination of 16 this term altogether.

17 Q. DID THE COMPANY ACKNOWLEDGE POTENTIAL ISSUES WITH

18 COMMUNICATION AND ADDRESS HOW THE COMPANY WILL HANDLE

19DISPUTES RELATED TO THE RECONCILIATION PROCESS AND20RESULTING BILLING CHARGES?

A. Yes, the Company does plan to provide communications to net metering customers
explaining the billing charge. In the August 16th Technical Session and in response to

⁵ As discussed in the August 16, 2023 technical session the Company indicated that this review would be completed within the next month to month and a half.

1		PUC 1-7, the Company committed to allowing for a dispute resolution process. ⁶ The
2		Division expects that this dispute process could include supporting evidence from the
3		customer of actual generation as measured by a production meter that is not visible to the
4		Company, a load sheet or other analysis to support an alternate estimate of consumption or
5		some combination of these approaches. It could also include a comparison of the
6		reconciliation results using estimated generation in addition to estimated consumption.
7		
8	IV.	REVIEW OF OTHER TARIFF CHANGES
9	Q.	WHAT OTHER CHANGES IS THE COMPANY PROPOSING FOR THE
10		TARIFF?
11	A.	In part A of Schedule B, the Company has added a requirement for the net metering
12		customer to include the total estimated generation to consumption ratio and then adds a
13		parenthetical: "(shall be as close to 100% as feasible, any ratio between 100% - 125% will
14		be subject to partial billing charge and any ratio greater than 125% will be subject to a full
15		billing charge)".
16	Q.	DOES THE DIVISION SUPPORT THIS CHANGE?
17	A.	The Division supports this addition as this requires prospective net metering customers to
18		make an estimate of this ratio and to encourage appropriately sized systems, while
19		reinforcing the consequences of actual generation exceeding consumption. This meets the
20		clear intent of the net metering statute as evidenced in the definition of an "eligible net

⁶ Response to PUC 1-7: "A customer may dispute RIE's estimation by either calling the contact center or emailing the Customer Energy Integration shared mailbox (CAP@RIEnergy.com). Customers will be made aware of this through the billing charge communication. Rhode Island Energy will re-evaluate disputed estimates. The plan for re-evaluation would be determined on a per-customer basis, dependent on the specific concerns raised in the dispute."

1 metering system" as an "...eligible net-metering resource that is reasonably designed and 2 sized to annually produce electricity in an amount that is equal to, or less than, the 3 renewable self-generator's usage at the eligible net-metering system site measured by the 4 three-year (3) average annual consumption of energy over the previous three (3) years at 5 the electric distribution account(s) located at the eligible net-metering system site." For 6 stand-alone systems, the most prudent approach may often be to size the system such that 7 the generation to consumption ratio is intentionally lower than 100%. In the case of satellite 8 accounts with uncertain load or high variability in load, this approach may be preferred to 9 minimize the risk that high levels of Excess Renewable Net Metering credits are created.

10 Q. ARE THERE OTHER CHANGES THE COMPANY IS PROPOSING FOR 11 SCHEDULE B OF THE TARIFF?

12 Yes, the proposed changes to part C of Schedule B will require the host account to have A. 13 secured agreements with offtake accounts having load that totals 100% of the expected 14 output of the net metering facility. Furthermore, the Company has indicated that failure to secure offtake agreements for as close to 100% of the output as possible will result in the 15 16 Company withholding authority to interconnect (ATI). As the Company states on page 14 17 of the filed testimony this helps ensure that net metering credits do not bank on the host 18 accounts and "will help minimize the number of accounts requiring a billing charge, and/or 19 minimize the value of the billing charge."

20

Q. DOES THE DIVISION SUPPORT THIS CHANGE?

A. Yes, the Division supports this change. Given the nature of many remote net metering systems in which the host account has little or no load, it is critically important that these projects secure adequate satellite accounts to receive all of the allocated credits at the outset. The Division notes that the ability to revise the Schedule B allocations on a

1 quarterly basis provides further flexibility for the project to adjust the allocations based on 2 changes in satellite account loads and/or to add or remove satellite accounts. In its response 3 to PUC 2-1, the Company further expressed willingness to consider alternatives to the 4 current Schedule B to allow for more flexibility to manage the allocation of credits in a 5 way that minimizes the likelihood of unused credits at the satellite accounts and/or stranded 6 credits at the host account. In response to PUC 1-13, the Company acknowledges that a 7 stand-alone facility could initially be treated as a qualifying facility (QF) and receive 8 compensation under an avoided cost rate. This facility could, once sufficient satellite 9 accounts have been enrolled, then transition to become a remote net metering customer. 10 Allowing a process of transition such as this provides potential flexibility for developers to 11 proceed with construction and interconnection in a manner that is efficient in terms of 12 obligations to providers of capital and tax equity. If a project is allowed to interconnect as 13 a QF while continuing to enroll eligible credit recipients, this restriction on ATI would be 14 considerably less impactful.

15

16

Q. DOES THE DIVISION SUPPORT THE COMPANY'S PROPOSED APPROACH AND TARIFF CHANGES?

A. The Division supports the Company's proposed approach for a process to conduct an annual reconciliation of Excess Renewable Net Metering Credits. The Division also supports the proposed tariff modifications and the Company's willingness to consider alternative ways to better manage remote net metering credit recipients in terms of more efficient methods for allocating credits and managing the roster of eligible credit recipients in order to minimize excess credits for these systems. The Division notes that the Company has acknowledged that additional tariff changes will be required to incorporate the impacts

- 1 of Senate Bill 684 and that those would be coming later this year. It does not appear that
- 2 any of those changes would impact this proposal.
- 3 VI. <u>CONCLUSION</u>
- 4 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 5 A. Yes.

Exhibit 1 – Resume for Michael W Brennan

Professional Experience

MW BRENNAN CONSULTING, LLC

Owner

- Consulting services on energy policy and utility regulatory activities •
- Business and financial consulting for a wide range of industries and clients on business • strategy, capital investment analysis, mergers and acquisitions, renewable energy projects and general business consulting

DUKE ENERGY

Renewable Compliance Manager

Responsible for development, oversight and implementation of a multi-year, 2,600 MW renewable competitive procurement program for Duke Energy Carolinas and Duke Energy Progress

- Development of program structure and guidelines including compliance with enabling statute and regulatory orders, procurement targets and schedule and proposal evaluation approach
- Regulatory filings and approvals for key documents including power purchase agreement, RFP documents and other guidance to bidders
- Key point of contact and interface with independent third party RFP administrator

Lead Wholesale Renewable Analyst

Provides deal structuring and analytic support to Duke Energy's Regulated Renewables and Distributed Energy department. Responsibilities include:

- Support of compliance activities related to NC Renewable and Energy Efficiency Portfolio Standards (REPS) including ownership and maintenance of tools to support decision making, compliance and reporting
- Analysis and pricing support for business development activities for new regulated utility products and services, investments and purchase activities for renewable and distributed energy technologies
- Development and ongoing maintenance of key Excel based analytic tools for project evaluation, rate design, and strategic analytics to support regulatory and legislative initiatives

ECO-SITE, INC.

Vice President – Finance and Administration

Lead key finance functions for a growing developer of cell towers and other wireless infrastructure. Grew this function from the formation of the company to multimillion dollar annual G&A and Capital budgets and rapidly growing revenue. Interface for company management and private equity investors on all finance, information technology and human resource related matters.

- Responsible for monthly, quarterly and annual financial close and reporting as well as the preparation and approval of the annual budget for G&A and Capital spending
- Managed commencement and ongoing financial administration of leases related to wireless infrastructure assets
- Developed a comprehensive multi-year forecasting and analytic tool for evaluation of opportunities and near and long term financial and strategic planning.
- Built all financial infrastructure for start-up company including implementation of accounting system, development of chart of accounts and key financial policies and processes
- Planned and coordinated the procurement and installation of key IT infrastructure to support growing staff and growing business needs
- Created and maintained key human resource functions including benefits programs, payroll, employee handbook, recruiting and onboarding procedures and performance management tools.

May 2019 to Present

Raleigh, NC

Raleigh, NC

March 2017 to March 2018

Durham, NC November 2012 to February 2017

March 2018 to April 2019

PROGRESS ENERGY

Director – Strategic and Financial Planning

Raleigh, NC 2007 to September 2012

Directed annual and ongoing corporate strategic planning process, financial planning process and market research function for Fortune 250 regulated electric utility company. Provided analytic and decision support for key strategic initiatives and decisions, coordinated and managed the preparation of consolidated financial forecasts/budgets and associated analysis, and planned and coordinated key strategic and financial planning meetings with CEO's senior management committee

- Led a key integration team that designed the financial planning and analysis, budgeting, strategy and M&A organizations for the new Duke Energy
- Played a key role in the analysis and due diligence associated with Progress Energy's merger with Duke Energy
- Revamped the strategic and financial planning process including improvements to subsidiary governance, enhanced interfaces with key stakeholders and more frequent and robust discussions with senior management
- In 2010, consolidated corporate strategy and financial planning and analysis functions into a single organization under my direction

Manager, Financial Analysis and Special Projects – Treasury Department2004 to 2007Managed team of 6 finance professionals responsible for providing financial analysis for major
capital and O&M projects, wholesale power contracts, divestitures and acquisitions and for
supporting special projects and initiatives.

Supervisor, Financial Services – Shearon Harris Nuclear Plant2002 to 2004Managed team of 6 finance and accounting professionals responsible for the financial governance and
control activities for a nuclear power plant.2000 to 2002Senior Analyst / Lead Financial Specialist2000 to 2002

Primary financial analyst for \$440 million project financing for 2,500 MW portfolio of natural gas fired power plants.

WOOLPERT, LLP - engineering and infrastructure consulting firmCharlotte, NCProject Engineer/ Project Manager, Water Resources Engineering Department1995 to 1998Managed numerous engineering projects for public and private clients and assisted municipal clientswith program development

US ARMY Fort Carson, CO/ Fort Leonard Wood, MO Platoon Leader and Battalion Adjutant, 4th Engineer Battalion 1992 to 1995 Led combat engineer platoon and assault and obstacle platoon before being promoted to battalion adjutant

Deployed with battalion as part of division task force to National Training Center in Fort Irwin CA

Education

WAKE FOREST UNIVERSITY, Babcock Graduate School of Management Winston-Salem, C Master of Business Administration; Recipient, Charles H. Babcock Scholarship

May 2000

NORTH CAROLINA STATE UNIVERSITY Raleigh, NC

Bachelor of Science in Civil Engineering; Magna Cum Laude; Recipient, Army ROTC Scholarship

May 1992