

1 PLACE: Via WebEx Videoconference
2 DATE: Wednesday, November 18, 2020
3 TIME: 10:00 a.m. - 12:30 p.m.
4 DOCKET NO: E-2, Sub 1257
5 BEFORE: Chair Charlotte A. Mitchell, Presiding
6 Commissioner ToNola D. Brown-Bland
7 Commissioner Lyons Gray
8 Commissioner Daniel G. Clodfelter
9 Commissioner Kimberly W. Duffley
10 Commissioner Jeffrey A. Hughes
11 Commissioner Floyd B. McKissick, Jr.
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15 IN THE MATTER OF:
16 Application of Duke Energy Progress, LLC,
17 for a Certificate of Public Convenience
18 and Necessity to Construct a
19 5-MW Solar Photovoltaic Generating Facility
20 in Buncombe County, North Carolina
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JASON WALLS

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1 P R O C E E D I N G S

2 CHAIR MITCHELL: Good morning everyone.
3 Let's come to order and go on the record, please. I'm
4 Charlotte Mitchell, Chair of the Utilities Commission,
5 and with me this morning are the following
6 Commissioners: Commissioner Brown-Bland; please
7 indicate your presence when I call your name.

8 COMMISSIONER BROWN-BLAND: I'm here.

9 CHAIR MITCHELL: Commissioner Gray.

10 COMMISSIONER GRAY: Good morning.

11 CHAIR MITCHELL: Commissioner Clodfelter.

12 COMMISSIONER CLODFELTER: Yes. Good
13 morning.

14 CHAIR MITCHELL: Commissioner Duffley.

15 COMMISSIONER DUFFLEY: Good morning.

16 CHAIR MITCHELL: Commissioner Hughes.

17 COMMISSIONER HUGHES: Good morning.

18 CHAIR MITCHELL: And Commissioner McKissick.

19 COMMISSIONER MCKISSICK: Good morning.

20 CHAIR MITCHELL: I now call for hearing
21 Docket Number E-2, Sub 1257, In the Matter of the
22 Application of Duke Energy Progress for a Certificate
23 of Public Convenience and Necessity to construct a
24 Solar Generating Facility in Buncombe County, North

NORTH CAROLINA UTILITIES COMMISSION

1 Carolina.

2 Intervention and participation in this
3 docket by the Public Staff is made and recognized
4 pursuant to Statute.

5 On July 27th, 2020, DEP filed an Application
6 for a Certificate of Public Convenience and Necessity
7 to construct the Woodfin Solar Generating Facility in
8 Buncombe County, along with the testimony and exhibits
9 of Lawrence Watson.

10 On August 6th, 2020, the Commission issued
11 its Order Scheduling Hearings, Requiring the Filing of
12 Testimony, Establishing Procedural Guidelines, and
13 Requiring Public Notice.

14 On August 14th, 2020, the Commission issued
15 an Order directing the public hearing to be held
16 remotely and rescheduling the expert witness hearing
17 and requiring a revised public notice.

18 On September 21st, 2020, the Commission
19 issued an Order that the expert witness hearing would
20 also be heard remotely.

21 On October 6th, 2020, the Public Staff moved
22 to cancel the public witness hearing due to the fact
23 that no members of the public had registered to speak
24 at the hearing that had been scheduled for October

1 8th.

2 On October 7th, the Commission issued an
3 Order canceling the remote public witness hearing.

4 On October 20th, 2020, the Public Staff
5 filed the testimony of Jeff Thomas, and filed Exhibit
6 1 to Witness Thomas' testimony on October 21st.

7 On October 27th, 2020, the Public Staff
8 filed its consent to hold the expert witness hearing
9 by remote means.

10 And on October 29th, 2020, the Company filed
11 its consent to hold the expert witness hearing by
12 remote means.

13 On November 4th, 2020, the Company and the
14 Public Staff filed a list of potential cross
15 examination exhibits.

16 And then on November 6th, 2020, the Company
17 filed its rebuttal testimony.

18 That brings us to the hearing today.

19 Pursuant to the State Ethics Act, I remind
20 all members of the Commission of their duty to avoid
21 conflicts of interest, and inquire at this time as to
22 whether any member of the Commission has a known
23 conflict of interest with respect to the matter coming
24 before us this morning?

1 (No response)

2 The record will reflect that no conflicts
3 have been identified. So we will move forward with
4 the proceeding, and I call on counsel to announce
5 their appearances, beginning with the Applicant.

6 MR. JIRAK: Thank you, Chair Mitchell and
7 Commissioners. Jack Jirak on behalf of Duke Energy
8 Progress, LLC, and I'm joined by co-counsel who will
9 now introduce themselves.

10 CHAIR MITCHELL: Good morning, Mr. Jirak.

11 MR. KAYLOR: Good morning, Chair and Members
12 of the Commission. Robert Kaylor appearing on behalf
13 of Duke Energy Progress, LLC. And it's nice to see
14 everybody on camera. It's been a while.

15 CHAIR MITCHELL: Good morning, Mr. Kaylor.
16 Good to see you, too.

17 MR. SOMERS: Good morning, Chair Mitchell
18 and Members of the Commission. This is Bo Somers,
19 Deputy General Counsel, also on behalf of Duke Energy
20 Progress.

21 CHAIR MITCHELL: Good morning, Mr. Somers.
22 All right. Public Staff.

23 MR. LITTLE: John Little with the Public
24 Staff, Legal Division.

1 CHAIR MITCHELL: Good morning, Mr. Little.

2 MR. LITTLE: Good morning.

3 CHAIR MITCHELL: Before we begin, any
4 preliminary matters that the Commission needs to take
5 up before moving into the hearing?

6 MR. JIRAK: No major procedural matters.
7 Chair Mitchell, with your permission, we were planning
8 on following the typical flow of the hearing. We'll
9 present our witness on direct first and then turn --
10 hear from the Public Staff witness, and then have our
11 rebuttal witnesses appear after the conclusion of
12 the -- (phone ringing in background)

13 CHAIR MITCHELL: Okay. Mr. Jirak, that is
14 how we will proceed this morning. And I assume
15 that -- I assume, Mr. Jirak, that you all have a
16 telephone line available for us to use in the event we
17 have to get into any discussion of confidential
18 information?

19 MR. JIRAK: Yes, Chair Mitchell, we do. We
20 circulated that previously and I'll be glad to
21 circulate it again if there's any Commissioner or
22 other parties that don't have that information.

23 CHAIR MITCHELL: Okay. All right. Thank
24 you, Mr. Jirak. I do believe we'll need that

1 circulated. I have not seen it in my -- I have not
2 seen it yet this morning, so let's get that
3 recirculated, just abundance of caution.

4 All right. With that --

5 MR. JIRAK: Commissioner, if I may, to whom
6 should we send that email to make sure it gets to you
7 and all of the Commissioners?

8 CHAIR MITCHELL: Please send it to Kathy
9 Lowell and she will get it circulated appropriately.

10 MR. JIRAK: Okay. We'll do that.

11 CHAIR MITCHELL: Thank you.

12 MR. SOMERS: Mr. Jirak, I'll be happy to
13 work on that while you're putting the first witness
14 up.

15 MR. JIRAK: Thank you, Mr. Somers.

16 CHAIR MITCHELL: Thank you, Mr. Somers.
17 Let's go ahead and proceed then. Mr. Jirak, the case
18 is with you.

19 MR. JIRAK: Thank you, Chair Mitchell. At
20 this time, DEP calls Lawrence Watson on direct
21 testimony.

22 CHAIR MITCHELL: Mr. Watson, I need to have
23 you affirmed, but let me see you on camera first. If
24 you could just speak out you will appear on my screen.

1 MR. WATSON: Good morning.

2 CHAIR MITCHELL: There you are.

3 LAWRENCE WATSON;

4 having been duly affirmed,

5 testified as follows:

6 CHAIR MITCHELL: You may proceed, Mr. Jirak.

7 MR. JIRAK: Thank you, Chair Mitchell.

8 DIRECT EXAMINATION BY MR. JIRAK:

9 Q Mr. Watson, please state your full name and title
10 for the record?

11 A My name is Lawrence Watson and I'm the Director
12 of Distributed Asset Commercial Development.

13 Q Thank you. Mr. Watson, did you prepare and cause
14 to be filed in this proceeding prefiled direct
15 testimony in question and answer form?

16 A Yes.

17 Q And do you have any changes that you need to make
18 to your prefiled direct testimony at this time?

19 A No.

20 Q If I were to ask you the same questions contained
21 in your testimony today, would your answers
22 remain the same?

23 A Yes.

24 Q Thank you.

1 MR. JIRAK: Chair Mitchell, at this time I
2 would request that the prefilled direct testimony of
3 Lawrence Watson be copied into the record as if given
4 orally from the stand.

5 CHAIR MITCHELL: Mr. Jirak, hearing no
6 objection to your motion, the prefilled direct
7 testimony of Mr. Lawrence Watson consisting of 12
8 pages filed on July 27th, 2020, will be copied into
9 the record as if delivered orally from the stand and
10 received into evidence.

11 MR. JIRAK: Thank you very much.

12 (WHEREUPON, the prefilled direct
13 testimony of LAWRENCE WATSON is
14 copied into the record as if given
15 orally from the stand.)
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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2 SUB 1257

In the Matter of)
Application of Duke Energy Progress, LLC)
for A Certificate of Public Convenience)
and Necessity to Construct a Solar)
Generating Facility in Buncombe County,)
North Carolina)

**DIRECT TESTIMONY OF
LAWRENCE WATSON**



1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Lawrence Watson, and my business address is 400 South Tryon
3 Street, Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed as Director of Distributed Asset Commercial Development by
6 Duke Energy Business Services LLC. Duke Energy Business Services LLC is
7 a service company affiliate of Duke Energy Progress, LLC (“DEP” or
8 “Company”). Duke Energy Progress is a wholly owned, indirect subsidiary of
9 Duke Energy Corporation (“Duke Energy”).

10 **Q. WHAT ARE YOUR RESPONSIBILITIES AS DIRECTOR OF**
11 **DISTRIBUTED ASSET COMMERCIAL DEVELOPMENT?**

12 A. I am responsible for developing and implementing specific strategies for Duke
13 Energy’s regulated utilities, including investment opportunities and product
14 offerings related to distributed energy technologies. Technologies include
15 solar, wind, energy storage, combined heat and power, microgrids, and electric
16 vehicles.

17 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
18 **BACKGROUND.**

19 A. I have a Bachelor of Arts degree from The George Washington University in
20 Washington, DC, a Master of Science in Planning from the University of
21 Tennessee in Knoxville, TN, and a Master of Business Administration from
22 Auburn University in Auburn, AL.

23

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NORTH**
2 **CAROLINA UTILITIES COMMISSION (“NCUC”)?**

3 A. No.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. The purpose of my testimony in this proceeding is to support DEP’s Application
6 for a Certificate of Public Convenience and Necessity (“CPCN”) to construct a
7 Solar Generating Facility in Buncombe County, North Carolina
8 (“Application”).

9 **Q. WERE YOU INVOLVED IN PREPARING DEP’S APPLICATION IN**
10 **THIS DOCKET?**

11 A. Yes.

12 **Q. PLEASE DESCRIBE THE WOODFIN SOLAR FACILITY.**

13 A. As detailed in the Application, the Company is seeking a CPCN to construct an
14 approximately 5 megawatt (“MW”) alternating current (“AC”) / 6.3 MW direct
15 current (“DC”) solar photovoltaic (“PV”) electric generator in Buncombe
16 County, North Carolina (“Woodfin Solar Facility”).

17

18 The Woodfin Solar Facility is part of a larger solar facility deployment plan and
19 grid modernization effort in the Western Carolinas. In response to the NCUC’s
20 urging of DEP to move forward in a timely manner on DEP’s commitment to
21 site solar and energy storage as part of the Western Carolinas Modernization
22 Project (“WCMP”), DEP identified opportunities to deploy 15 MW of solar PV
23 and over 5 MW of energy storage projects throughout the region.

1 **Q. PLEASE DESCRIBE THE UNIQUE BENEFITS OF THE WOODFIN**
2 **SOLAR FACILITY.**

3 A. The Woodfin Solar Facility will allow DEP to gain experience owning and
4 operating a solar facility on a customer's landfill site, and it will also be
5 supportive of the customer's renewable energy goals. While landfill PV
6 development has occurred across the United States, Duke Energy has not
7 deployed solar on a municipal-owned landfill in the Carolinas.

8
9 The closed Buncombe County Landfill ("Site") is located within the town limits
10 of Woodfin, North Carolina and is bordered on the south-southwest by the
11 French Broad River. The Site is approximately 190 acres and is enclosed by
12 security fencing along its perimeter boundary. Subject to final design of the
13 facility, the Woodfin Solar Facility will occupy approximately 30 acres of the
14 Site.

15 **Q. PLEASE PROVIDE FURTHER BACKGROUND REGARDING THE**
16 **WOODFIN SOLAR FACILITY.**

17 A. The Woodfin Solar Facility is a key component of the Western Carolinas
18 Modernization Project, or "WCMP" and the Commission's WCMP CPCN
19 Order in Docket No. E-2, Sub 1089, which accepted DEP's commitment to
20 solar and storage projects and directed DEP to file as soon as practicable CPCN
21 applications to construct at least 15 MW of solar at the Asheville Plant or in the
22 Asheville region.

23

1 DEP still intends to construct a solar generation and battery storage facility at
2 the Asheville Plant site itself. While final plans are contingent upon completion
3 of the ash basin work and steam plant demolition activities, the Company
4 expects to install approximately 8 – 10 MW of solar generation, along with
5 additional battery storage at the Asheville Plant site. DEP will seek a CPCN
6 from the Commission for the Asheville Plant Site generation facilities prior to
7 the commencement of construction, which is expected to occur in the 2023-
8 2024 timeframe. The solar facility at Hot Springs, a component of the recently
9 approved Microgrid, accounts for approximately 2 MW of the 15 MW
10 commitment. Should all three projects receive approval and be constructed,
11 this will account for the 15 MW of solar commitment as part of the WCMP.

12 **Q. PLEASE PROVIDE FURTHER BACKGROUND ON THE SITE**
13 **SELECTED FOR THE WOODFIN SOLAR FACILITY.**

14 A. In order to identify sites suitable for solar in the Greater Asheville Region, DEP
15 conducted a GIS solar suitability survey. Many alternative sites were evaluated,
16 including Company-owned land.

17

18 During DEP's solar siting process, DEP was made aware that Buncombe
19 County was interested in making their site available for solar development to
20 support the County's renewable energy and climate change goals. DEP
21 presented Buncombe County with a proposal to allow DEP to lease the landfill
22 site to support the WCMP's goal to advance solar development in this area.

1 The site was determined to have the following beneficial characteristics: (1) the
2 site is on a municipal landfill and zoned for industrial land use and has
3 approximately 30 acres of relatively flat, buildable area on one parcel; (2) the
4 acreage is sufficient for siting multiple MW of solar generation, and the site is
5 primarily clear of trees and debris; (3) the point of interconnection is located
6 adjacent to the planned project and on the same property and does not require
7 additional land rights or permitting to access the interconnection facilities; (4)
8 the site is not adjacent to residential customers; (5) the site does not require tree
9 clearing to support the solar; and (6) the site is owned by a single landowner
10 willing to enter into a lease agreement in support of the project and
11 community's goals.

12
13 While developing solar on a landfill can have an impact on costs due to the
14 inability to penetrate the landfill cap, the size and other positive characteristics
15 described help to balance overall project costs and limit local environmental
16 impacts. In addition, finding available sites within the Asheville region that can
17 support a solar facility of this scale while limiting environmental impacts (such
18 as tree clearing and wetland disturbance) is challenging given topography and
19 high land cost in the Asheville region.

20
21 A Ground Lease Agreement was executed with Buncombe County in August
22 2018. The term of the Ground Lease Agreement is 25 years from the date of
23 operation and includes three optional five-year renewal terms.

1 **Q. PLEASE PROVIDE FURTHER DETAILS ON THE WOODFIN SOLAR**
2 **FACILITY.**

3 A. The Woodfin Solar Facility consists of PV modules affixed to a ballasted
4 foundation system, 20 degree fixed-tilt racking, solar inverters, electrical
5 protection and switching equipment, and step-up transformers. Additional
6 equipment to support the Woodfin Solar Facility will include circuit breakers,
7 combiners, surge arrestors, conductors, disconnect switches, and connection
8 cabling. Appendix 2 to Exhibit 2 shows the preliminary site layout of all major
9 equipment including the PV panels' location. The Woodfin Solar Facility is
10 expected to produce approximately 8,600 MWh per year. This corresponds to a
11 20% net capacity factor. The service life of the asset is 25 years.

12 **Q. HOW DOES THE WOODFIN SOLAR FACILITY FIT WITH THE**
13 **COMPANY'S COMMITMENT AND THE COMMISSION'S ORDER IN**
14 **THE WESTERN CAROLINAS MODERNIZATION CPCN DOCKET?**

15 A. Once again, the Woodfin Solar Facility is an integral piece of the Western
16 Carolinas Modernization Project. The WCMP is a collaborative energy
17 innovation project for the Asheville area in the western region of DEP's service
18 territory. As the Commission is aware from its approval in the WCMP CPCN
19 docket, the goal of the WCMP is to partner with the local community and
20 elected leaders to help transition Western North Carolina to a cleaner, smarter
21 and more reliable energy future. DEP is committed to this partnership to
22 promote the efficient use of energy in the region. The WCMP allows for the
23 retirement of DEP's existing Asheville coal units and replacement of the

1 capacity with new combined cycle natural gas units. Additionally, the project
2 calls for the deliberate investment in distributed energy resources, including
3 solar and storage, and increased promotion and access to new and existing
4 demand-side management and energy efficiency (“DSM/EE”) programs in
5 Western North Carolina. In the WCMP CPCN Order, the Commission
6 accepted DEP’s commitment to solar and storage projects and directed DEP file
7 as soon as practicable CPCN applications to construct at least 15 MW of solar
8 at the Asheville Plant or in the Asheville region. The Woodfin Solar Facility
9 will meet a portion of this commitment.

10

11 **Q. PLEASE DISCUSS THE NEED FOR THE WOODFIN SOLAR**
12 **FACILITY.**

13 A. The Project complies with DEP’s commitments and the Commission’s
14 requirements in the WCMP CPCN Order, and is consistent with and designed
15 to promote the public policies of North Carolina, specifically those enumerated
16 in Senate Bill 3. The Woodfin Solar Facility will diversify the resources used
17 to reliably meet the energy needs of consumers in the State while providing
18 greater energy security through the use of indigenous energy resources
19 available within the State.

20

21 While landfill PV development has occurred across the United States, Duke
22 Energy has not deployed solar on a municipal-owned landfill in the Carolinas.
23 The deployment of utility-owned and -operated solar at this location has several

1 advantages; it represents an adaptive reuse of a closed municipal landfill, it will
2 allow Duke Energy to gain experience owning and operating a ballasted solar
3 facility on a landfill site, and it will have less of an environmental impact in the
4 area due to the site being clear of vegetation and other sensitive environmental
5 features. In addition, developing on this site represents a unique public-private
6 partnership between DEP and a municipal customer that allows for DEP to
7 build, operate and maintain a grid-connected solar asset while also supporting
8 the customer's renewable energy goals. Successful deployment and execution
9 of this project may lead to further projects and partnership opportunities with
10 other municipal customers and potentially on company-owned landfills in the
11 future.

12 **Q. IS THE WOODFIN SOLAR FACILITY CONSISTENT WITH DEP'S**
13 **MOST-RECENT INTEGRATED RESOURCE PLAN?**

14 A. Yes. The Company's 2018 Integrated Resource Plan ("IRP") was filed
15 September 5, 2018 in Docket No. E-100, Sub 157 and includes the Woodfin
16 Solar Facility in the Western Carolinas Modernization Plan update sections.
17 From a total system perspective, the DEP 2018 IRP identifies the need for
18 approximately 6,300 MW of new resources to meet customers' energy needs
19 by 2033. Additionally, the 2018 IRP calls for approximately 1,000 MW of
20 incremental solar installations over the next five years. Accordingly, the
21 Woodfin Solar Facility is consistent with the DEP's 2018 IRP.

22

1 **Q. PLEASE DISCUSS THE ENVIRONMENTAL ATTRIBUTES OF THE**
2 **WOODFIN SOLAR FACILITY.**

3 A. Operation of the Woodfin Solar Facility will have no emissions or pollutants,
4 and the generation source of the solar power will be 100% renewable. In
5 addition, the Woodfin Solar Facility will be designed in accordance with State
6 of North Carolina environmental requirements with regard to materials.

7 **Q. TO YOUR KNOWLEDGE, HAS DEP FILED AND PROVIDED ALL**
8 **INFORMATION AND OBTAINED OR IDENTIFIED ALL FEDERAL**
9 **AND STATE LICENSES, PERMITS, AND EXEMPTIONS REQUIRED**
10 **FOR CONSTRUCTION AND OPERATION OF THIS PROPOSED**
11 **GENERATION FACILITY?**

12 A. Yes. I believe that the CPCN Application provides all information required
13 under the Commission's rules. Further, the Woodfin Solar Facility is expected
14 to be fully permitted prior to construction. A complete list of all required
15 federal, state and local approvals and their status is included in Exhibit 2 to the
16 Application.

17 **Q. WHAT IS THE PROJECTED COST OF THE WOODFIN SOLAR**
18 **FACILITY?**

19 A. The cost estimate for the Woodfin Solar Facility is approximately [BEGIN
20 CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]. The estimate
21 includes Engineering Procurement & Construction ("EPC"), major equipment,
22 labor, and associated permitting and development costs. Any tax credits and

1 accelerated depreciation benefits will offset project costs for the benefit of
2 customers.

3 **Q. WHAT IS THE ESTIMATED CONSTRUCTION SCHEDULE FOR THE**
4 **WOODFIN SOLAR FACILITY?**

5 A. If Commission approval were to be obtained, the limited notice to proceed is
6 expected to be issued in December 2020, with site mobilization to begin in
7 February 2021, with final commissioning in July 2021.

8 **Q. DID DEP EVALUATE THE WHOLESALE MARKET FOR**
9 **ALTERNATIVES TO SERVE THE NEEDS THE PROJECT WILL**
10 **MEET?**

11 A. No. Because of the unique circumstances of the Woodfin Solar Facility, and
12 the Commission's WCMP CPCN order requirements, DEP did not evaluate the
13 existing wholesale market for alternatives to the capacity and energy to be
14 provided by the Woodfin Solar Facility. DEP has conducted a competitive bid
15 process that included soliciting cost proposals for all of the major components
16 and construction of the project to ensure the lowest reasonable cost for our
17 customers. The results from the bid process serve as the basis of the cost
18 estimate to support this Application. Upon a favorable ruling on this
19 Application, DEP will execute an agreement with the successful bidder to
20 engineer, procure equipment and construct the facility. In addition, DEP intends
21 to seek to obtain components and services from North Carolina providers where
22 possible and effective.

1 **Q. IN CONCLUSION, WHY IS DEP REQUESTING APPROVAL TO**
2 **CONSTRUCT THE WOODFIN SOLAR FACILITY?**

3 A. The Woodfin Solar Facility is one of many deployments and initiatives
4 designed to meet the goals of the WCMP Order and DEP's commitment to
5 invest in smart, clean energy projects in Western North Carolina. The Woodfin
6 Solar Facility presents a unique opportunity for DEP to collaborate with our
7 customers and community stakeholders on an innovative solution and reflects
8 Duke Energy's commitment to proactively support our customers and their
9 energy-related goals and objectives. We are pleased with the strong local
10 support for the Woodfin Solar Facility and look forward to bringing it online
11 for our customers' benefit.

12 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

13 A. Yes.

1 BY MR. JIRAK:

2 Q And, Mr. Watson, did you also prepare and cause
3 to be filed in this proceeding that certain
4 Application for a Certificate of Public
5 Convenience and Necessity to construct the
6 Woodfin Solar Generating Facility along with the
7 supporting exhibits for that Application?

8 A Yes.

9 MR. JIRAK: Chair Mitchell, once again, at
10 this time I would also move that the Application and
11 the supporting exhibits for the Application be entered
12 into the record.

13 CHAIR MITCHELL: Mr. Jirak, hearing no
14 objection to your motion, it is allowed.

15 (WHEREUPON, Duke Energy Progress
16 Application and Exhibits are
17 received in evidence.)

18 MR. JIRAK: Thank you very much. And, Chair
19 Mitchell, with your permission at this time, I would
20 ask that the witness now proceed with a summary of his
21 direct testimony.

22 CHAIR MITCHELL: All right. Mr. Watson, you
23 may proceed.

24 A Thank you. Good morning Chair Mitchell and

1 Commissioners.

2 As the Commission is well aware,
3 the Woodfin Solar Project is one piece of the
4 Western Carolinas Modernization Project or WCMP,
5 which was approved by the Commission in 2016.
6 The WCMP is a comprehensive plan to retire the
7 1960's era Asheville coal units and replace them
8 with a combination of new natural gas generation,
9 at least 15 megawatts of new solar generation and
10 5 megawatts of new battery storage in the
11 Asheville area, and to establish a collaborative
12 community effort to delay or implement the need
13 for additional contingent new combustion turbine
14 unit through innovative and aggressive energy
15 efficiency and demand-side management efforts.
16 The Company's plan received substantial public
17 and community support and, with some
18 modification, was approved by the Commission as
19 required by the public convenience and necessity.

20 The Commission's Order approving
21 the WCMP specifically commended DEP for its
22 collaborative community efforts and expressly
23 directed the siting of at least 15 megawatts of
24 solar and 5 megawatts of storage in the Asheville

1 region.

2 The Woodfin Solar Project
3 presented for Commission approval in this
4 proceeding continues the collaborative nature of
5 the WCMP through a partnership with Buncombe
6 County to allow DEP to construct the solar
7 project on a closed landfill. This partnership
8 with Buncombe County is absolutely consistent
9 with the intent of the WCMP and has garnered
10 immense public support. While I, along with my
11 colleague Todd Beaver, will address the economics
12 of the project in more detail on rebuttal, I will
13 note at this time that the Company has taken
14 steps to ensure that the capital cost of the
15 project is reasonable and cost-effective, and we
16 disagree with the approach that the Public Staff
17 has taken in assessing whether this project is in
18 the public interest.

19 In conclusion, Chair Mitchell and
20 Commissioners, DEP is proud of this project and
21 believes that this unique partnership with
22 Buncombe County is nearly -- is a nearly perfect
23 manifestation of the intent behind the WCMP as
24 approved by the Commission, which is reflected in

1 the scores of supportive letters filed in this
2 docket from a wide range of individuals, groups
3 and governmental organizations. Because the
4 project fulfills the Commission's vision in its
5 WCMP Order and does so at a prudent cost, the
6 Commission should find the Woodfin Solar Project
7 to be in the public interest and grant the
8 Company's request for a Certificate of Public
9 Convenience and Necessity.

10 Q Thank you, Mr. Watson.

11 MR. JIRAK: Chair Mitchell, at this time the
12 witness is available for cross examination.

13 CHAIR MITCHELL: Mr. Little, you may
14 proceed.

15 MR. LITTLE: Thank you, Chair.

16 CROSS EXAMINATION BY MR. LITTLE:

17 Q Good morning, Mr. Watson. We're here today as --
18 for this project as this project is an outgrowth
19 of the WCMP latter cases, correct?

20 A Yes, that's correct.

21 Q And the WCMP Order says to -- does it say to
22 build this specific project or does it say build
23 a certain amount of solar generation?

24 A I believe the WCMP Order stated that we would

1 file 15 megawatts as expeditiously as possible to
2 support the WCMP.

3 Q And in your testimony you -- is the Company
4 relying solely on the WCMP Order as authority to
5 build this project?

6 A Do you mind restating the question?

7 Q Sure. Is the WCMP Order the only reason your --
8 this project is being constructed?

9 A We did file this project to comply with the WCMP
10 Order.

11 Q And in that Order the Commission says to also
12 file the instant CPCN filing, too; is that
13 correct?

14 A Yes.

15 Q And this facility is being built on a landfill;
16 is that correct?

17 A That's correct.

18 Q And the landfill has a cap to keep rain water and
19 surface water from penetrating down to what's
20 buried underneath and -- is that correct?

21 A Yes, that's correct.

22 Q And the cap can't be penetrated to -- so that --
23 to allow water to penetrate, so you have to build
24 on top of the cap, and does that raise the cost

1 of the project?

2 A It is correct that we cannot penetrate the cap of
3 the landfill, and so that has been accommodated
4 within the plans for the project. There is a
5 slight premium to place a solar facility on top
6 of a landfill since you cannot penetrate the cap;
7 that is correct.

8 Q And you also say that -- well let me -- so the
9 cost of the project, this is above what is the
10 current avoided cost rate, correct?

11 A Yes, that's correct.

12 Q And building on the landfill, is this a unique
13 project for DEP?

14 A I'm sorry, counselor, you broke up there for a
15 second.

16 Q I asked if building on a landfill was a unique
17 project for DEP. Do you have -- has DEP ever
18 built on a landfill before?

19 A So it is a unique project for DEP and, as I'm
20 aware, we have not built a project of scale on a
21 landfill previously within DEP.

22 Q Has any other Duke entity or affiliated Duke
23 Energy Corporation had experience with these?

24 A As I understand it, DEC built a testing facility

1 at the Marshall steam station on top of a coal
2 ash landfill previously. That was not a
3 production facility, rather it was to test
4 technology at that location.

5 MR. JIRAK: Excuse me. Mr. Little, I
6 apologize. This is Jack Jirak. Mr. Watson, if you
7 wouldn't mind muting your -- it's a little awkward but
8 if you wouldn't mind muting your microphone in between
9 questions. We're getting a little bit of feedback
10 when Mr. Little is asking questions.

11 A (Nods in agreement).

12 MR. JIRAK: Thank you, Mr. Watson.

13 BY MR. LITTLE:

14 Q So with DEP -- Mr. Watson, let's talk about the
15 Marshall steam solar facility. That was a test
16 facility to build on a -- to gain experience
17 building on a landfill.

18 A As I understand it, that was a test facility to
19 test different technologies, racking technology
20 as well as solar panels, not necessarily to build
21 on a landfill. As I understand it that was just
22 space that was available to test this technology.

23 Q But it was still built on a landfill, correct?

24 A Yes, that's correct. It was built on a coal ash

1 landfill.

2 Q And, in addition to the Woodfin Solar facility,
3 the WCMP Order I believe makes mention of
4 building a solar facility on a coal ash landfill
5 at the Asheville combined cycle site; is that
6 correct?

7 A I believe it said to build a facility at the coal
8 ash -- I'm sorry, pardon me, at the Asheville
9 plant site itself as part of that Order.

10 Q Can you just -- do you have a -- is that being
11 constructed or is it in the planning stages?
12 Could you just give us a brief synopsis?

13 A I'm happy to. That project is under development
14 at this point. We have filed an interconnection
15 request for a project of approximately 9.5
16 megawatts. I think my testimony states that it's
17 in the 8 to 10-megawatt range. That project
18 cannot move forward until after the -- all the
19 work at the Asheville plant site is complete
20 including the demolition of the existing coal
21 facility, coal generating facility, and so we
22 plan to file a CPCN soon after that -- or soon --
23 when that work is ready to be constructed in the
24 2023-2024 timeframe.

1 Q Thank you. Just one last question. If the
2 Commission grants the CPCN certificate, how --
3 who's going to pay for this facility? Will it be
4 recovered through rates?

5 A Yes. We would recover this project through
6 rates.

7 Q All DEP ratepayers will be paying for this
8 facility, not just the ratepayers in the
9 Asheville area?

10 A That is correct.

11 Q Thank you, Mr. Watson. That's all the questions
12 I have at this time.

13 A Thank you.

14 CHAIR MITCHELL: Any redirect, Mr. Jirak?

15 MR. JIRAK: Just a few questions. Thank
16 you, Chair Mitchell.

17 REDIRECT EXAMINATION BY MR. JIRAK:

18 Q Mr. Watson, just a couple of quick items for you.
19 You were asked some questions about the
20 incremental cost of constructing solar,
21 utility-scale solar resources on a landfill; do
22 you recall those questions from Mr. Little?

23 A Yes.

24 Q Would you also agree that it's very challenging

1 to find land suitable for utility-scale solar
2 development in the Asheville area?

3 A Yes. It's extremely challenging to find land in
4 the -- for solar.

5 Q And what about this site specifically makes --
6 the Woodfin Solar site makes it particularly
7 suitable for utility-scale solar development?

8 A This site has several advantages that's described
9 in the testimony. The fact that the site is a
10 single parcel on relatively flat, buildable land
11 is a plus. There is access to immediate
12 interconnection at the location. There is
13 existing controlled access to the facility. We
14 have minimal environmental impacts meaning
15 minimal tree clearing if any, no wet land impacts
16 at this location, no sensitive environmental
17 areas, and we have a favorable below market lease
18 rate.

19 Q And with respect to the lease rate, would you
20 agree that the below market lease rate certainly
21 offsets any, to some degree some of the
22 incremental costs of having to build on a
23 landfill?

24 A Yes.

1 Q And would you also agree that there are some
2 qualitative benefits to this site to the extent
3 that the Company is able to partner with Buncombe
4 County in this project?

5 A Yes.

6 Q Now briefly, there was a few questions at the
7 very start of the cross from Mr. Little regarding
8 the need for the project and he asked you
9 questions regarding the basis for the project and
10 the fact that this project flows from the
11 Commission's directive in its WCMP Order; do you
12 recall that -- those series of questions?

13 A Yes.

14 Q And do you also recall that the Company's IRP, as
15 required by Statute, was attached to our
16 Application for this facility as well; do you
17 recall that?

18 A Yes.

19 Q And is it also your understanding that the IRP
20 itself shows the need for incremental solar
21 additions to the Company's system in the coming
22 years?

23 A Yes.

24 MR. JIRAK: Thank you, Chair Mitchell.

1 Those are all the redirect questions I have at this
2 time.

3 CHAIR MITCHELL: Questions from the
4 Commission? I'll begin with Commissioner Brown-Bland.

5 COMMISSIONER BROWN-BLAND: I have no
6 questions.

7 CHAIR MITCHELL: Commissioner Gray.

8 COMMISSIONER GRAY: I have no questions.

9 CHAIR MITCHELL: Commissioner Clodfelter.

10 COMMISSIONER CLODFELTER: Nothing for me.

11 Thank you.

12 CHAIR MITCHELL: Commissioner Duffley.

13 COMMISSIONER DUFFLEY: No questions.

14 CHAIR MITCHELL: Commissioner Hughes.

15 COMMISSIONER HUGHES: I'll wait til
16 rebuttal. No questions.

17 CHAIR MITCHELL: Okay. And Commissioner
18 McKissick.

19 COMMISSIONER MCKISSICK: I have no questions
20 at this time.

21 CHAIR MITCHELL: All right. Mr. Watson, it
22 looks like you are relieved for the time being.

23 A Thank you.

24 (The witness is excused)

1 CHAIR MITCHELL: We will now hear from the
2 Public Staff. You may call your witness, Mr. Little.

3 MR. LITTLE: Yes, Chair Mitchell, the Public
4 Staff calls Jeff Thomas.

5 JEFF THOMAS;

6 having been duly affirmed,

7 testified as follows:

8 CHAIR MITCHELL: Mr. Little, you may
9 proceed.

10 DIRECT EXAMINATION BY MR. LITTLE:

11 Q Mr. Thomas, why don't you give us your full name,
12 and business address and position at the Public
13 Staff for the record, please?

14 A Yes. My name is Jeff Thomas. My business
15 address is 430 North Salisbury Street in Raleigh,
16 North Carolina. And I am an Engineer with the
17 Public Staff - Energy Division.

18 Q And on October 20th of this year, did you prefile
19 in this case direct testimony consisting of 24
20 pages?

21 A Yes, I did.

22 Q And on October 21st, did you file an exhibit to
23 your testimony titled Thomas Exhibit 1 consisting
24 of a one-page response by Duke Energy Corporation

1 to Public Staff Data Request 2-17?

2 A I did.

3 Q And do you have any additions or changes to make
4 to your prefiled testimony?

5 A Yes, I have one minor change. On page 18 of my
6 prefiled testimony - I'll give you one moment to
7 get there - it's footnote 11, and the last
8 sentence of footnote 11 should read *in this case*
9 *recovery of the incremental portion of the cost*
10 *of the facility through the REPS Rider would not*
11 *be appropriate as DEP does not need or intend to*
12 *use the RECs to satisfy any REPS requirements.*

13 Q Is that the only correction you have?

14 A Yes.

15 Q And if I were to ask you the same questions today
16 as -- that are in your prefiled testimony, would
17 your answers be the same?

18 A They would.

19 MR. LITTLE: Chair Mitchell, at this time I
20 would ask that Mr. Thomas' prefiled direct testimony
21 be copied into the record as if given orally from the
22 stand and his exhibit be identified as premarked.

23 CHAIR MITCHELL: Hearing no objection, the
24 prefiled testimony of Witness Thomas will be copied

1 into the record as if delivered orally from the stand.
2 I would note that there are confidential portions of
3 his testimony and ask counsel to work with our court
4 reporter to ensure that those confidential portions
5 are redacted as appropriate.

6 Mr. Jirak, I would also note just for
7 purposes of the record that Mr. Watson's direct
8 testimony has confidential information in it as well,
9 so let's just make sure that that information is
10 treated appropriately in the transcript.

11 MR. JIRAK: Thank you, Chair Mitchell. We
12 will do so.

13 CHAIR MITCHELL: Okay. And following
14 through with Witness Thomas, his prefiled exhibit will
15 be identified as marked when prefiled.

16 (WHEREUPON, Thomas Exhibit 1 is
17 marked for identification as
18 prefiled.)

19 (WHEREUPON, the prefiled direct
20 testimony, as corrected, and
21 Appendix A of JEFF THOMAS is
22 copied into the record as if given
23 orally from the stand.)

24

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1257

In the Matter of)	
Application of Duke Energy Progress, LLC,)	TESTIMONY OF
for a Certificate of Public Convenience)	JEFF THOMAS
and Necessity for a 5-MW Solar)	PUBLIC STAFF – NORTH
Photovoltaic Generating Facility in)	CAROLINA UTILITIES
Buncombe County, North Carolina)	COMMISSION

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-2, SUB 1257**

**Testimony of Jeff Thomas
On Behalf of the Public Staff
North Carolina Utilities Commission**

October 20, 2020

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND**
2 **PRESENT POSITION.**

3 A. My name is Jeff Thomas. My business address is 430 North
4 Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am an
5 engineer with the Energy Division of the Public Staff – North Carolina
6 Utilities Commission.

7 **Q. BRIEFLY STATE YOUR QUALIFICATIONS AND DUTIES.**

8 A. My qualifications and duties are included in Appendix A.

9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

10 A. The purpose of my testimony is to present to the Commission the
11 Public Staff's analysis and recommendations on Duke Energy
12 Progress, LLC's (DEP) Application for a Certificate of Public
13 Convenience and Necessity (CPCN) for a proposed 5 megawatt

1 (MW)¹ solar photovoltaic (PV) facility (the Woodfin Facility or the
2 Facility) in Buncombe County, North Carolina.

3 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

4 A. My testimony first presents a summary of the Application as filed by
5 DEP. I then present the results of the Public Staff's investigation and
6 conclude with recommendations to the Commission.

7 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE**
8 **COMMISSION.**

9 A. Based upon the Public Staff's investigation of the Application, review
10 of DEP's recent Western Carolinas Modernization Project (WCMP)
11 updates, and review of the Commission's March 28, 2016 *Order*
12 *Granting Application in Part, With Conditions, and Denying*
13 *Application in Part* in Docket No. E-2, Sub 1089 (WCMP Order), the
14 Public Staff believes that DEP has not sufficiently justified the need
15 for the Facility as presented. In addition, the cost of the energy
16 produced by the Facility is well above DEP's avoided costs as well
17 as recent long-term solar PV bids procured through the Competitive
18 Procurement of Renewable Energy (CPRE) program. As such, the
19 Public Staff recommends that the Commission deny the Application
20 without prejudice, and permit DEP to refile with modifications
21 reflecting the recommendations of the Public Staff. I present the

¹ All references to MW refer to nameplate alternating current (AC), unless otherwise stated.

1 Commission with several proposals which, if implemented, would
2 reduce the amount of the Facility's cost that is recovered from DEP's
3 ratepayers. If DEP were to revise its proposal consistent with our
4 recommendations, it would most likely result in the Public Staff
5 recommending approval of the CPCN, although this would be
6 dependent upon the details of the revised filing.

7 **I. CPCN APPLICATION**

8 **Q. PLEASE DESCRIBE THE CPCN APPLICATION.**

9 A. DEP filed its application and exhibits (Application) in this docket on
10 July 27, 2020, pursuant to N.C. Gen. Stat. § 62-110.1 and
11 Commission Rule R8-61, requesting Commission authorization to
12 construct the Facility. The Application is supported by the testimony
13 and exhibits of DEP witness Lawrence Watson.

14 **Q. PLEASE DESCRIBE THE PROPOSED FACILITY.**

15 A. DEP proposes to build a 5 MW AC / 6.3 MW DC fixed-tilt solar PV
16 generation facility on the site of a closed landfill along the French
17 Broad River in Buncombe County. The owner of the closed landfill is
18 Buncombe County. The proposed facility will occupy approximately
19 30 acres of the 190 acre site and will require ballasted racking so as
20 to not penetrate the landfill cover. DEP estimates that the facility will
21 produce approximately 9,413 megawatt-hours (MWh) in its first year,

1 reflecting a capacity factor of 21.5%.² DEP proposes to interconnect
 2 the Facility to its distribution system and has stated that the site is
 3 adjacent to the proposed point of interconnection and requires no
 4 additional land rights or permitting to access the interconnection
 5 facilities.

6 **Q. WHAT IS THE ESTIMATED COST OF THE FACILITY?**

7 A. DEP estimates that the project capital cost will be approximately
 8 [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] and
 9 has estimated the NC retail revenue requirement to be [BEGIN
 10 CONFIDENTIAL] [REDACTED]
 11 [REDACTED] [END CONFIDENTIAL]. This
 12 equates to a system capital cost of [BEGIN CONFIDENTIAL] [REDACTED]
 13 [REDACTED]
 14 [REDACTED] [END CONFIDENTIAL]. DEP estimates
 15 annual non-capital costs (including operating costs, lease expenses,
 16 property taxes, and insurance) to be [BEGIN CONFIDENTIAL]
 17 [REDACTED]
 18 [REDACTED] [REDACTED]³

² The capacity factor of 20% stated on page 7 of witness Watson's testimony "reflected previous assumptions on the system production" and is superseded by the 21.5% capacity factor cited in the application.

³ The system and NC retail cost per MWh are slightly different because the calculation allocates system operating costs by the O&M factor of [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]. [REDACTED] [END CONFIDENTIAL] The system costs per MWh are a more accurate estimate of the total operational costs as it does not include any allocation factors.

1 **[END CONFIDENTIAL]**. Average operational expenses over the life
2 of the project are estimated to be **[BEGIN CONFIDENTIAL]** [REDACTED]
3 [REDACTED] **[END**
4 **CONFIDENTIAL]**. DEP estimates that the impact to customer rates
5 in the first year will be an increase of 0.02%.

6 **Q. HOW DOES DEP DEMONSTRATE THE NEED FOR THE**
7 **FACILITY?**

8 A. DEP describes the Facility as a “key component” of the WCMP and
9 states that it presents a unique opportunity to work with the local
10 community as a result of the WCMP Order. Along with planned solar
11 PV generation at the site of the Asheville coal plant, as well as the
12 Hot Springs microgrid,⁴ DEP states that the Facility will meet its
13 commitment to construct at least 15 MW of solar generation in the
14 Asheville region.

15 In addition, DEP states that the Facility is consistent with the public
16 policies of North Carolina, specifically those enumerated in Senate
17 Bill 3 (Session Law 2007-397). DEP states that the Facility provides
18 “greater energy security” by using indigenous energy resources in
19 the state.

20 DEP also emphasizes the “unique public-private partnership” with
21 Buncombe County, the owner of the proposed project site. DEP

⁴ Approved in Docket No. E-2, Sub 1185, consisting of a 2 MW solar PV facility.

1 presented Buncombe County with a proposal to allow it to lease the
2 site and support the county's renewable energy goals.⁵ **[BEGIN**

3 **CONFIDENTIAL]** [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED].

8 **[END CONFIDENTIAL]**

9 **Q. DOES THE PUBLIC STAFF BELIEVE THE APPLICATION IS**
10 **COMPLETE?**

11 A. Yes, the Application is complete. DEP has provided information
12 satisfying all requirements of N.C. Gen. Stat. § 62-110.1 and
13 Commission Rule R8-61. However, the Application is currently under
14 review by the State Clearinghouse. The Public Staff believes that
15 DEP's demonstration of need required by Commission Rule R8-
16 61(b)(1)(iv) is insufficient and the Facility, as proposed, is not in the
17 public interest.

⁵ Buncombe County recently adopted a resolution which set a goal of reaching 100% renewable energy for county operations by 2030 and for the entire community by 2042. See <https://www.buncombecounty.org/governing/depts/sustainability-office/clean-energy-resources/100-percent-renewable-plan.aspx>

1 **II. Public Staff's Investigation**

2 **Q. DOES THE PUBLIC STAFF FIND DEP'S STATEMENT OF NEED**
3 **TO BE SATISFACTORY?**

4 A. No. The Public Staff believes that DEP's sole reliance upon the
5 WCMP Order is inadequate for justifying the Facility as proposed. In
6 reaching this conclusion, the Public Staff first reviewed the WCMP
7 Order, as well as the Commission's October 31, 2018 *Order Finding*
8 *Application Incomplete* (Incomplete Order) and its May 10, 2019
9 *Order Granting Certificate of Public Convenience and Necessity with*
10 *Conditions* (Hot Springs Order), in Docket No. E-2, Sub 1185
11 (together, the Sub 1185 Orders). As an initial matter, the Public Staff
12 does not believe that the WCMP Order directs DEP to build solar and
13 storage in the Asheville region at any cost. The specific language of
14 the WCMP Order, taken in conjunction with the Commission's Sub
15 1185 Orders, make it clear that the Commission expects DEP to
16 propose cost-effective generation facilities that meet the public
17 convenience and necessity requirement, and that reliance on the
18 WCMP Order alone, while ignoring the need for cost-effectiveness,
19 is insufficient to meet this requirement.

20 The Public Staff first notes that the proposed 15 MW of solar and 5
21 MW of energy storage in the Asheville region was originally proposed

1 by DEP in its application to build combined cycle units at the site of
2 the Asheville coal plant, as discussed in the WCMP Order, at 24:

3 DEP stated that it is committed to pursuing a CPCN for
4 new solar generation in Asheville for a minimum of 15
5 MW. DEP indicated that the size of the solar facility at the
6 Asheville plant cannot be known until the Asheville coal
7 units are demolished and the 1964 ash basin is
8 excavated. DEP explained that it takes approximately
9 100 acres for a 15 MW utility-scale solar facility. DEP
10 committed that if the Asheville site configuration does not
11 allow the construction of 15 MW or more of solar
12 generation, it will supplement the on-site solar facility with
13 a combination of rooftop, community, or other utility-scale
14 solar facilities at other locations in the Asheville area.
15 (emphasis added)

16 The clearest directive given by the Commission regarding DEP's
17 solar commitment is found in the WCMP Order, at 38:

18 The Commission commends the work that DEP has
19 begun in engaging Asheville community leaders to work
20 collaboratively on load reduction measures. The
21 Commission shall require DEP to continue to update it on
22 these efforts, along with its efforts to site solar and
23 storage in the western region. As to solar and storage,
24 the Commission expects DEP to file as soon as
25 practicable the CPCN to construct at least 15 MW of solar
26 at the Asheville Plant or in the Asheville region. To the
27 extent DEP does not do so, the Commission reserves the
28 right on its own motion or on the motion of any interested
29 party to investigate DEP's decision not to move forward
30 with its representations. (emphasis added)

31 The Commission's expectation is that a CPCN application be filed
32 and that DEP move forward with its representations, which proposed
33 supplementing the proposed Asheville solar facility with a
34 combination of "rooftop, community, or other utility-scale solar

1 facilities.” This is not a directive to build at any cost, but rather to file
2 a CPCN application, presumably for a cost-effective facility; the
3 CPCN requirements must still be met. Further reinforcing the
4 Commission’s intent that all generation facilities satisfy the public
5 necessity requirement on their own merits is exemplified in the
6 Incomplete Order, at 1:

7 The Chairman finds that DEP’s application is incomplete.
8 DEP’s application does not contain all of the information
9 required by N.C.G.S. § 62-110.1 and Commission Rule
10 R8-61. For example, the application lacks what
11 alternatives DEP considered. In addition, DEP did not
12 provide the information required by Commission Rule R8-
13 61(b) and (c). The Chairman cites these examples as
14 representative of the required information, but the
15 examples do not represent a complete list of missing
16 information and testimony. Notwithstanding the
17 Commission’s March 28, 2016 Order Granting
18 Application In Part, With Conditions, And Denying
19 Application in Part in Docket No. E-2, Sub 1089, the
20 Chairman reminds DEP that it must demonstrate that
21 generation projects meet the public convenience and
22 necessity requirement. (emphasis added)

23 Finally, the Commission emphasizes that each WCMP-related
24 generation facility must stand on its own merits in the Hot Springs
25 Order, at 16:

26 The Commission finds, within its sound discretion, that
27 the value of the opportunity to learn through the approval
28 of this one, discrete project is in the public convenience
29 and necessity. The Commission has not given DEP a
30 blank check as demonstrated by the conditions of a cost
31 cap and the rebuttable presumption that any construction
32 costs exceeding the cost cap shall not be recoverable
33 from ratepayers. The Commission’s determination in the
34 present case is based upon the unique facts presented in

1 this application and shall not be precedent for future,
 2 even if similar, applications.

3 As discussed above, the Hot Springs Microgrid is also
 4 consistent with the WCMP Order and the Commission's
 5 expectation that DEP pursue solar and battery storage
 6 projects in the Asheville region. ... The Commission
 7 supports the cost-effective development of solar and
 8 battery storage by DEP as provided in the WCMP Order
 9 and encourages DEP to continue to pursue such projects
 10 on behalf of its customers. (emphasis added)

11 The Public Staff believes the Commission made its expectations
 12 abundantly clear in the Hot Springs Order that solar generation
 13 facilities built in the DEP's West region are not, by virtue of the
 14 WCMP Order alone, in the public interest. The Public Staff also
 15 believes that the Commission did not issue a directive to build solar
 16 in the DEP-West region regardless of the cost.

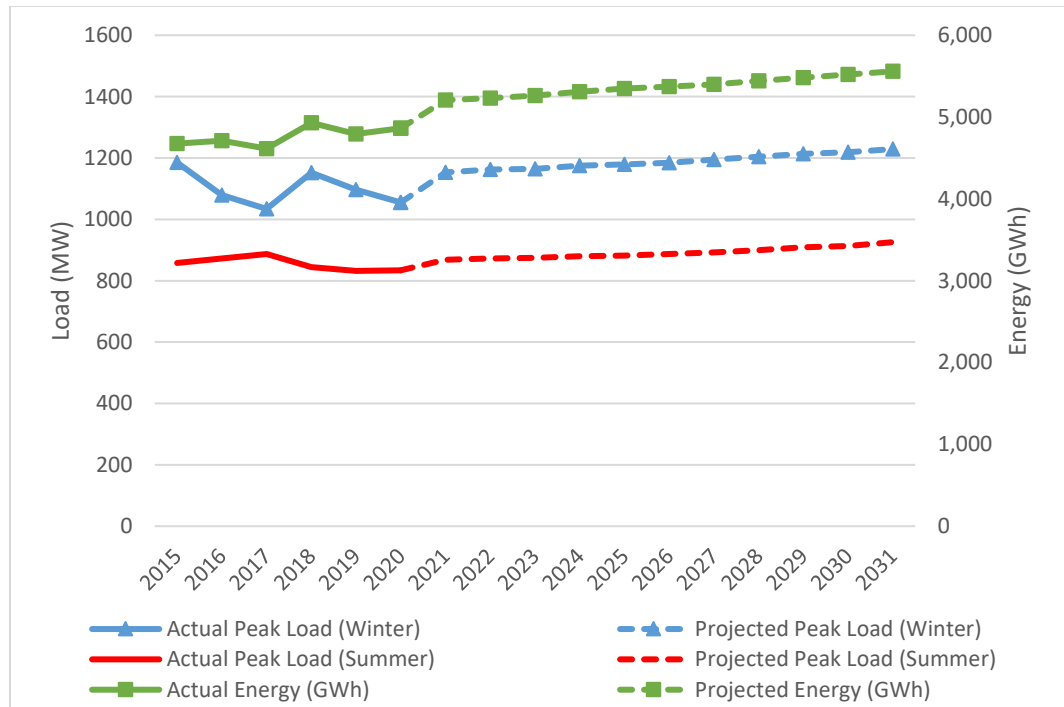
17 **Q. ABSENT THE WCMP ORDER, DOES THE PUBLIC STAFF**
 18 **BELIEVE THIS FACILITY MEETS THE PUBLIC CONVENIENCE**
 19 **AND NECESSITY REQUIREMENT?**

20 A. No. The Public Staff began its investigation by asking DEP this very
 21 question. DEP responded, stating that:

22 The Woodfin solar project meets the public interest and
 23 necessity requirement as it is implementing the
 24 Commission's directives in connection with the Western
 25 Carolinan Modernization Project (WCMP). The Company
 26 does not believe that it is relevant to this proceeding to
 27 speculate concerning other potential basis for satisfying
 28 the public interest and necessity.⁶

⁶ See DEP's response to DR 2-17, attached as Thomas Exhibit 1.

1 The Public Staff disagrees, and conducted its own investigation into
 2 how the Facility may or may not meet the specific needs of the DEP-
 3 West region. The Public Staff first looked at historical and projected
 4 load growth in the DEP-West region to determine how DEP expects
 5 load to change over time. Figure 1 below shows historical and
 6 projected peak loads and energy demand over the period 2015 to
 7 2031. Over the last five years, DEP-West peak load growth was
 8 relatively flat or declining, which may be a result of energy efficiency
 9 and demand side management implementation as a result of the
 10 WCMP Order.



11

12

Figure 1: DEP-West Peak Load and Energy Consumption

13

14

Table 1 below compares projected load growth in DEP-West to the entire DEP system from recent Integrated Resource Plans (IRPs),

1 showing that the load growth in DEP-West is overall lower than
 2 expected in the entire DEP system.

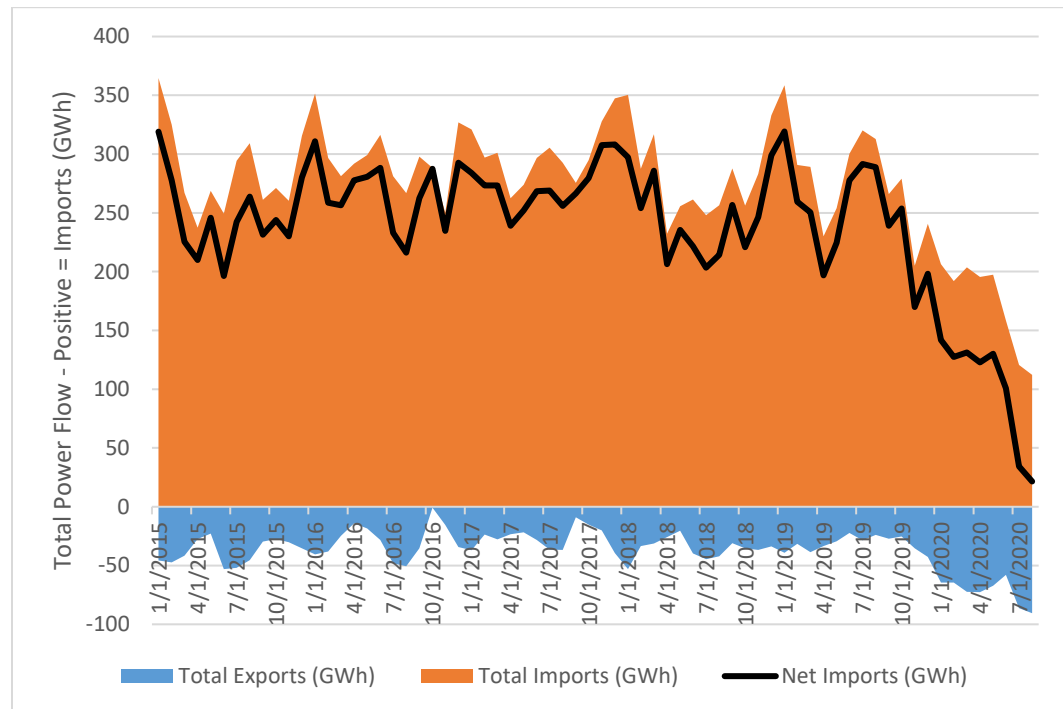
3 *Table 1: Comparison of DEP-W and DEP System Projections. Includes impact of EE.*

	DEP-West (PSDR 3)	DEP (2019 IRP)	DEP (2020 IRP)
Projected Winter Peak Load Growth	0.6%	0.9%	0.9%
Projected Energy Demand Growth	0.7%	1.0%	0.8%

4 Analysis of hourly loads shows that the peak load in DEP-West has
 5 occurred, and is expected to occur, exclusively in the winter
 6 mornings, when solar generation from the Facility is expected to be
 7 low or non-existent. As seen in Figure 1, winter peak load has
 8 historically been approximately 30% higher than summer peak load,
 9 and DEP expects this to continue over the next ten years. While peak
 10 load and energy demand are growing in the DEP-West region, they
 11 are not growing at an exceptional rate; and regardless of the load
 12 growth, the Facility, which is not paired with energy storage, will be
 13 unable to provide needed capacity during peak load hours.

14 Further, an analysis of hourly power imports and exports shows that
 15 DEP-West has traditionally been reliant upon power imports to meet
 16 local demand; however, these imports have significantly decreased

- 1 as the Asheville combined cycle units began operation in early 2020,
 2 as can be seen in Figure 2.⁷



3

4

Figure 2: Monthly Power Flows in and out of DEP-West, 2015 – 2020.

5 **Q. WHAT OTHER FACTORS DOES DEP PRESENT TO**
 6 **DEMONSTRATE THE NEED FOR THE WOODFIN FACILITY?**

- 7 A. In the Application, DEP provides other justifications, including (1)
 8 resource diversity, (2) consistency with public policies of North
 9 Carolina, specifically Senate Bill 3; (3) greater energy security; and
 10 (4) consistency with DEP's IRP. While the Facility may satisfy these

⁷ Power Block 1 (280 MW) came online on December 27, 2019. The Power Block 2 combustion Turbine (180 MW) came online January 15, 2020 (natural gas only). The Power Block 2 steam turbine (100 MW) came online on April 5, 2020.

1 goals, it is important that DEP's efforts to meet these goals are
2 accomplished in the most cost effective manner.

3 **Q. IS THE WOODFIN FACILITY COST EFFECTIVE?**

4 A. No. The Public Staff recognizes that DEP believes it has a
5 responsibility to build solar capacity in the DEP-West region.
6 However, the Public Staff is concerned over the high cost of the
7 Facility relative to other solar facilities in North Carolina and the
8 Facility's high energy cost relative to system avoided costs.

9 The Levelized Cost of Energy (LCOE) is a metric that measures the
10 total costs of building and operating a generator to the total energy
11 produced, over the lifetime of the generator. Utilizing the 21.5%
12 capacity factor estimated by DEP, the LCOE for the Facility is
13 **[BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]**.
14 DEP's estimated 21.5% capacity factor is higher than the capacity-
15 weighted average capacity factor of DEP's solar fleet over the past
16 three years of approximately 19.3%. Applying a 19.3% capacity
17 factor to the Facility results in an LCOE of **[BEGIN CONFIDENTIAL]**
18 **[REDACTED] [END CONFIDENTIAL]**. DEP's levelized 25-year
19 avoided cost rate applicable to solar generators is approximately
20 **[BEGIN CONFIDENTIAL] [REDACTED]**
21 **[REDACTED]**
22 **[REDACTED]**

1 [REDACTED]. [END CONFIDENTIAL] In
2 addition, DEP has yet to file for a CPCN to construct solar PV at its
3 own Asheville plant site, as it asserted it intended to do in the WCMP
4 Order. Constructing solar at this location would reduce overall costs,
5 as it would not be required to lease or purchase land to site the
6 facility.

7 **Q. DID THE PUBLIC STAFF RECOMMEND APPROVAL OF THE**
8 **HOT SPRINGS MICROGRID, WHICH WAS NOT COST**
9 **EFFECTIVE?**

10 A. Yes. In the case of the Hot Springs microgrid, the Public Staff
11 recommended approval of the CPCN based on unique factors
12 specific to the application, despite the Public Staff's finding that the
13 facility was not the most cost effective solution to service quality
14 issues in the Hot Springs area.⁸ The Commission agreed with the
15 Public Staff's recommendation to treat the microgrid as a pilot
16 project, and approved the CPCN subject to significant reporting
17 requirements and a cost cap.⁹

18 **Q. WHY IS THE WOODFIN FACILITY DIFFERENT FROM THE HOT**
19 **SPRINGS MICROGRID?**

20 A. The Hot Springs microgrid provides a learning opportunity for DEP
21 and provided system benefits beyond energy and capacity – which

⁸ See Docket No. E-2, Sub 1185, Testimony of Jeff Thomas, at 19.

⁹ See the Hot Springs Order, at 13-15.

1 the Public Staff believes are “material, even if they are difficult to
2 estimate accurately without real world experience.”¹⁰

3 The Hot Springs microgrid is intended to provide local reliability in
4 the remote Hot Springs area, deferred distribution investments,
5 provide system ancillary services, and meet winter peak demand
6 with the attached energy storage system. The Woodfin Facility offers
7 no such benefits and merely provides ratepayers with expensive
8 energy and little to no capacity during peak load hours in the winter.
9 DEP has viable alternatives it should have considered to reduce the
10 premium that the Company believes should be borne by ratepayers.

11 **III. Public Staff Recommendations**

12 **Q. WHAT CHANGES TO THE APPLICATION MIGHT LEAD THE**
13 **PUBLIC STAFF TO RECOMMEND THE COMMISSION GRANT**
14 **THE CPCN?**

15 A. The Public Staff has discussed with DEP the possibility of modifying
16 the Application to reduce incremental costs, potentially meet other
17 statutory requirements, or both. If the Facility’s stakeholders are
18 willing to modify their position to reduce those incremental costs, the
19 Public Staff’s concerns would most likely be mitigated. The Public
20 Staff proposes three possible ideas for doing so. This list is not

¹⁰ See Docket No. E-2, Sub 1185, Testimony of Jeff Thomas, at 20.

1 exhaustive, and the Public Staff is open to other proposals from
2 stakeholders and from DEP in its rebuttal testimony.

3 **Q. WHAT IS THE PUBLIC STAFF'S FIRST PROPOSAL TO REDUCE**
4 **THE COST OF THE FACILITY BORNE BY RATEPAYERS?**

5 A. First, if DEP were to voluntarily agree to not seek recovery of the
6 incremental costs of the Facility, the Public Staff's concerns would
7 be resolved. DEP's 25-year avoided cost is approximately **[BEGIN**
8 **CONFIDENTIAL]** **[REDACTED]** **[END**
9 **CONFIDENTIAL]** therefore, approximately **[BEGIN**
10 **CONFIDENTIAL]** **[REDACTED]** **[END CONFIDENTIAL]** of the Facility costs
11 are "incremental," in the terminology commonly used in the REPS
12 arena. If DEP agreed to only seek recovery of **[BEGIN**
13 **CONFIDENTIAL]** **[REDACTED]** **[END CONFIDENTIAL]** of the Facility costs
14 in base rates, the Public Staff's concerns would be resolved.¹¹

15 **Q. WHAT IS THE PUBLIC STAFF'S SECOND PROPOSAL?**

16 A. As stated in its Application, the Facility will support Buncombe
17 County's renewable energy goals.¹² **[BEGIN CONFIDENTIAL]** **[REDACTED]**
18 **[REDACTED]**

¹¹ Duke Energy Carolinas, LLC (DEC) agreed through settlements not to seek recovery in base rates of the incremental portion of the cost of its Mocksville Solar facility (Docket No. E-7, Sub 1098), Monroe Solar facility (Docket No. E-7, Sub 1079), and its Woodleaf Solar facility (Docket No. E-7, Sub 1101). In those cases, DEC was allowed to recover the incremental portion through the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) rider. In this case, recovery of the incremental portion of the costs of the Facility through the REPS rider would not be inappropriate, as DEP does not need, or intend to use, the RECs to satisfy any REPS requirements.

¹² See Testimony of Lawrence Watson, at 5.

1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED] . [END CONFIDENTIAL]

13 The Public Staff does not oppose local renewable energy goals, but

14 the Public Staff does not believe that the costs of meeting such local

15 goals should be borne by all utility ratepayers, nor should the cost

16 lack market discipline. As more and more municipalities and local

17 governments adopt renewable energy goals, the cost burden on

18 other ratepayers would continue to increase if the costs were paid

19 for by all utility ratepayers.¹⁴ [BEGIN CONFIDENTIAL] [REDACTED]

20 [REDACTED]

¹³ [BEGIN CONFIDENTIAL] [REDACTED]
 [REDACTED]
 [REDACTED] . [END CONFIDENTIAL]

¹⁴ The Public Staff is aware of renewable energy goals or commitments adopted so far by Buncombe County, Asheville, Charlotte, and Durham.

1 [REDACTED]
 2 [REDACTED]
 3 [REDACTED]. [END

4 **CONFIDENTIAL]**

5 **Q. WHAT IS THE PUBLIC STAFF'S THIRD PROPOSAL?**

6 A. On April 4, 2019, the Commission issued its *Order Approving*
 7 *Revised Community Solar Program Plan and Riders* in Docket Nos.
 8 E-2, Sub 1169, and E-7, Sub 1168, in which it approved the
 9 Community Solar Programs of DEP and DEC under N.C. Gen. Stat.
 10 § 62-126.2 and 62-126.8. A Community Solar Program is defined by
 11 Commission Rule R8-72(b)(2) as “a program offered by an offering
 12 utility for the procurement of electricity by the offering utility for the
 13 purpose of providing subscribers the opportunity to share the costs
 14 and benefits associated with the generation of electricity by the
 15 facility.” However, DEP and DEC have not yet implemented their
 16 Community Solar Programs for any of their customers.¹⁵
 17 Commission Rule R8-72 does not require that a utility purchase the
 18 power from a facility created by a Community Solar Program.
 19 Community solar programs with utility-owned generation assets are

¹⁵ The *Joint Interim Community Solar Program Report* was filed on October 1, 2019, in Docket Nos. E-2, Sub 1169 and E-7, Sub 1168. DEP cited uncertainty over cost recovery of the Community Solar asset after the program period as an obstacle to building its own facility (at 9).

1 popular throughout the country wherever there is support by the local
2 community.¹⁶

3 Four entities filed letters in support of the Application: The Blue
4 Horizons Project, MountainTrue, The Western North Carolina
5 Renewables Coalition, and the Buncombe County Commission. In
6 particular, the Buncombe County Commission states that in 2017, it
7 “passed a resolution to use 100% renewable energy by 2030 and
8 this commitment is deeply supported across the community.” These
9 letters indicate substantial community support for the Facility, which
10 leads the Public Staff to believe that the Facility could be used to fulfill
11 the requirements of a Community Solar Program.

12 DEP could offer subscriptions of the Facility’s output to its customers
13 in Buncombe and adjacent counties that are interested in supporting
14 renewable energy. The subscriptions could offset some or all of the
15 incremental costs of the Facility. The Facility’s expected commercial
16 operation date of mid 2021 aligns with the capability to include
17 monthly on-bill charges and credits described in DEP and DEC’s
18 *Joint Interim Community Solar Program Report* filed on October 1,
19 2019 (2020 for testing, 2022 for DEP completion).¹⁷

¹⁶ There were numerous Consumer Statements of Position filed in Docket No. E-2, Sub 1089, many of which were supportive of renewable energy in the region.

¹⁷ *Id.*, at 5-6.

1 [BEGIN CONFIDENTIAL] [REDACTED]
 2 [REDACTED]
 3 [REDACTED]
 4 [REDACTED]
 5 [REDACTED]
 6 [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9 [REDACTED]
 10 [REDACTED]
 11 [REDACTED]. [END CONFIDENTIAL]

12 While this is certainly a more complex option, the Public Staff
 13 believes DEP should study the option of using the Facility as a
 14 “Community solar energy facility” as defined by Commission Rule
 15 R8-72(b)(1). In fact, DEP suggested the potential use of community
 16 solar to meet a portion of the 15 MW of solar PV in the Asheville area
 17 in its request to build the Asheville combined cycle plant.¹⁹ DEP’s
 18 successful involvement with the community and the community’s
 19 interest in this issue is clear. Successfully deploying an HB 589
 20 program, while also building 5 MW of solar in line with the goals of

¹⁸ N.C. Gen. Stat. § 62-126.8(e)(8).
¹⁹ See DEP’s Application for Certificate of Public Convenience and Necessity and Motion for Partial Waiver of Commission Rule RS-61, filed January 15, 2016 in Docket No. E-2, Sub 1089, at 12-13.

1 the WCMP, would be a more acceptable justification of need than
2 was provided in the Application.

3 **Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS?**

4 A. Yes. Should the Commission grant the CPCN, either as filed,
5 conditioned on DEP adopting one or more of the Public Staff's
6 recommendations, or under some other conditions, I further
7 recommend that the Commission condition the CPCN on the
8 following:

9 1. That DEP construct and operate the Facility in strict
10 accordance with all applicable laws and regulations, including the
11 provisions of all permits issued by the North Carolina Department of
12 Environmental Quality; and

13 2. That issuance of the CPCN does not constitute
14 approval of the final costs associated with the construction of the
15 facility for ratemaking purposes and the order is without prejudice to
16 the right of any party to take issue with the ratemaking treatment of
17 the final costs in a future proceeding.

18 **Q. DO YOU HAVE ANY OTHER COMMENTS?**

19 A. Yes. As part of the discovery process, the Public Staff's Accounting
20 Division submitted data requests intended to obtain support for
21 certain inputs to the Company's calculation of the revised revenue
22 requirement spreadsheet provided on DR2-9. The responses

1 provided by the Company did not give the Public Staff sufficient
2 information to fully evaluate the inputs utilized by the Company.
3 Given the overall facts and circumstances of this case, it was not
4 ultimately necessary for this information to be available to formulate
5 my position and recommendation. However, should circumstances
6 change so that the cost of the project is reduced to an extent that it
7 may be cost-effective, I recommend that the Public Staff be allowed
8 to submit additional discovery to the Company to further delve into
9 these details.

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

11 A. Yes, it does.

APPENDIX A

QUALIFICATIONS AND EXPERIENCE

JEFFREY T. THOMAS

I graduated from the University of Illinois Champaign-Urbana in 2009, earning a B.S. in General Engineering. Afterwards, I worked in the manufacturing sector in operations management for several electronic manufacturing companies, such as General Electric and United Technologies Corporation. I left manufacturing in 2015 and attended North Carolina State University, earning a M.S. in Environmental Engineering. My educational experience includes cost benefit research on smart grid components at the Future Renewable Energy Electricity Delivery and Management (FREEDM) Systems Engineering Research Center and power system modeling. My master's thesis focused on electric power system modeling, capacity expansion planning, and the effect of various state and nation-wide energy policies in North Carolina. After completing my graduate degree, I joined the Public Staff in November 2017. In my current role, I have worked on the implementation of HB 589 programs, utility cost recovery proceedings, renewable energy program management, customer complaints, Certificate of Public Convenience and Necessity applications, and other aspects of utility operations and regulation.

1 MR. LITTLE: Thank you, Chair Mitchell.

2 Mr. Thomas is available for cross examination.

3 CHAIR MITCHELL: All right. Mr. Jirak, you
4 may proceed.

5 MR. KAYLOR: I'll take over, Chair Mitchell.

6 CHAIR MITCHELL: Okay, Mr. Kaylor, you may
7 proceed.

8 CROSS EXAMINATION BY MR. KAYLOR:

9 Q First of all, Mr. Thomas, Bob Kaylor, we've
10 talked before I believe. Did I recall that you
11 have a recent addition or you're expecting an
12 addition to your family?

13 A Yes. My son was born last Thursday.

14 Q Congratulations. I'll relate to you and to the
15 Commission that in the Harris rate case in 1988
16 my son was born and it was during the hearing.
17 That was 32 years ago. So congratulations.

18 A Thank you.

19 Q A few questions for you here mainly about the
20 public record. Do you -- in the course of your
21 duties and activities with the Commission -- with
22 the Public Staff in regard to things at the
23 Commission, do you look at the consumer
24 statements that have been filed in this docket?

1 A Yes, I do. I look at consumer statements that
2 are filed in almost every case that I'm active
3 on.

4 Q So you're -- are you current with the ones that
5 have been filed just in the last couple of days
6 in this docket?

7 A Yes. I've reviewed the statements of position
8 and letters of support.

9 Q And so you would agree with me that there are at
10 least over 180 individual letters of support for
11 the project?

12 A Yes. I would agree that there are quite a few
13 letters of support in this docket for the
14 project. I have to take those into account,
15 along with the consumer statements of position
16 that I read in the general rate cases that also
17 oppose rate increases, so I have to make sure I
18 understand the public's sentiment holistically.

19 Q And so did you see any letters that were opposed
20 to this project in this docket?

21 A I did not see any letters in this docket opposing
22 the Woodfin facility.

23 Q And I will relate to you that I went through I
24 think all 180 of them and I didn't see a single

1 one that said they were opposed to it. Some of
2 them seemed to question whether or not Duke was
3 behind trying to reject the project. And do you
4 have any idea how they got that understanding?

5 A I do not.

6 Q So let's start first of all with the County. The
7 County has actually sent two letters supporting
8 the project; is that correct?

9 A Yes. They had additional comments filed
10 following the filing of my testimony.

11 Q And the Mayor of Asheville has filed a supporting
12 letter?

13 A That's correct.

14 Q And there have been supporting letters from the
15 Western North Carolina Sierra Club?

16 A Yes. And several others as well, yes.

17 Q And the letter from the Sierra Club indicated
18 that that person was speaking on behalf of all
19 12,000 members of the Sierra Club in Western
20 North Carolina; do you recall that?

21 A I'd have to look at the specific language -- is
22 it there in the -- subject to check, yes, I would
23 take your word for that.

24 Q And there was a very extensive letter in support

1 filed by the North Carolina Sustainable Energy
2 Association. Did you have a chance to look at
3 that letter?

4 A Yes. Yes, I have.

5 Q And there -- you know, I have to be frank with
6 you, I was happy to see the letter, from the Duke
7 Progress perspective, because we don't very often
8 get letters of support from NCSEA. Do you have
9 that letter available there?

10 A Yes. I have it open in front of me if you would
11 like to discuss.

12 Q Well, on the bottom of page 1, they indicate that
13 the County has offered to not charge DEP for the
14 lease. And it says *it's no secret that the*
15 *western portion of the State, particularly in the*
16 *mountains, are much more difficult to site for a*
17 *solar facility.* Do you take issue with that
18 statement?

19 A No. I believe that's -- that's a fair summary of
20 the rebuttal testimony and the option, I believe
21 Option 1 that DEP presented.

22 Q In your summary, you basically recommend that the
23 Commission reject our Application unless the
24 Company is able to adhere to the three options

1 that you include in your summary; is that
2 correct?

3 A Those are the three options that I proposed but,
4 you know, I think I stated in my testimony I'm
5 open to additional options, additional venues
6 that might make this project more cost-effective.
7 And I also would point out that the Asheville
8 site has not been finalized yet and, without
9 knowing the final capacity that's available at
10 that site, the Woodfin facility may not even be
11 needed to meet the 15-megawatt target in the
12 WCMP.

13 Q And one of your suggestions or your options would
14 be to reduce the amount to be recovered from
15 ratepayers. That would imply that you are
16 suggesting that the Company should agree to some
17 type of a cap; is that correct?

18 A Essentially, yes, to simply not seek recovery of
19 the incremental portion. And I understand
20 through the rebuttal testimony that DEP indicated
21 that was not a workable option, but it just
22 simply highlighted my concerns with the
23 significant premium this project would impose on
24 DEP ratepayers.

1 Q And when you refer to the incremental portion,
2 you are referring to the amount of the project
3 over and above the avoided cost?

4 A That's correct. The 25-year-levelized avoided
5 cost cap site using the Sub 158 methodology
6 inputs.

7 Q And I believe that if you'll look back at the
8 letter I think - from the NCSEA - I think they
9 were not very impressed with your reliance on the
10 avoided cost in that proceeding. Would that be
11 an accurate representation of their position?

12 A I think that's fair to say.

13 Q And then one of your other options would be to
14 increase the amount that the County pays for
15 the RECs produced by the facility, correct?

16 A That's correct.

17 Q And then your third would be, you say *that*
18 *proposing the facility as a community solar*
19 *facility consistent with NC 62-126.8*. Do you
20 really think that the community solar is an
21 option here?

22 A Well, based on the outpouring of community
23 support for this project, yeah, I believe that
24 community solar is a viable option. There seems

1 to be significant support in the community and I
2 imagine that that would translate to interest in
3 subscribing to the output of this facility.

4 Q And are you familiar with other community solar
5 projects in North Carolina?

6 A It's been awhile since I reviewed some of the
7 other community solar projects. Most of which
8 are run by EMCs in North Carolina so there are a
9 significant number of those in operation, but
10 it's been awhile since I reviewed those as I was
11 reviewing DEP and DEC's application for a
12 community solar program.

13 Q So you wouldn't be aware of the subscription
14 rates for any of those projects, would you?

15 A To my knowledge, subject to check, several of
16 those were fully subscribed. I believe Blue
17 Ridge EMC had a fully subscribed one, and Roanoke
18 EMC was either at or near subscription levels,
19 but I'd have to look back at some of my comments
20 I made during the community solar proceeding.

21 Q But they would be EMCs and not investor-owned
22 utilities, correct?

23 A Yes, those were EMC programs. And before HB589,
24 community solar wasn't a mandate for the

1 utilities and no investor-owned utility had
2 proposed a community solar program.

3 Q And you talk about the excessive cost of this
4 project over and above avoided cost. Without
5 mentioning any numbers there, would you agree
6 with me that if the Commission were to approve
7 this project as it's set forth now by the Company
8 that the incremental cost to ratepayers in North
9 Carolina throughout the DEP system would be about
10 2/100ths of a dollar, in other words, about two
11 cents per month?

12 A I know that in its Application DEP estimated the
13 incremental cost of this facility to ratepayers
14 would be .02 percent impact on rates. I don't
15 know exactly what that constitutes in terms of
16 dollars. But I think when we looked at this, we
17 view rate increases in the context of everything
18 that Duke is doing. As you know, I spent
19 significant time opining on the cost of Duke
20 Energy's Grid Improvement Program, there are
21 significant cost increases, and, in my view, our
22 position is that the cost increases imposed by
23 Woodfin are unnecessary.

24 Q So if the Commission were to adopt your

1 recommendation to require the Company only
2 recover what you state would be the avoided cost,
3 that would be an increase of about one penny per
4 hundred dollars, would it not, one cent per month
5 for ratepayers?

6 A Subject to check I'll accept your
7 characterization. But I would also note that if
8 the Commission were to accept my recommendation,
9 the power being produced in general by the
10 Woodfin facility would be at the system avoided
11 cost much like any PURPA facility or CPRE,
12 Competitive Procurement of Renewable Energy,
13 solar facility. And I believe in that case
14 ratepayers would be indifferent to the energy
15 from the Woodfin facility or from the Duke Energy
16 Progress system and I believe that that, without
17 the premium, ratepayers are like I said
18 indifferent and those costs would displace other
19 generation at system cost.

20 Q So to finalize there, in terms of a ratepayer
21 that has a bill of a hundred dollars per month
22 from DEP on the system, the difference between
23 your proposal would be an increase of one penny
24 per \$100 and the Company's position would be two

1 pennies per \$100; does that sound appropriate
2 there?

3 A Based on my analysis, I think that that sounds
4 fair. Subject to check I'll accept the dollar
5 amounts. I did not actually calculate those, I
6 went off the percentage given by DEP. But like I
7 said, Duke Energy Progress is making and planning
8 significant projects and capital investments over
9 the next 10 years. And I think that we, the
10 Public Staff, we look at any increase to those
11 rates and we try to make sure that the ratepayers
12 are not going to experience significant cost
13 increases for unnecessary investments.

14 Q And did you also see the motion by the Southern
15 Environmental Law Center attorney, Gudrun
16 Thompson, representing MountainTrue and Sierra
17 Club that in view of the Public Staff's position,
18 which they were not aware of prior to the first
19 public hearing on October 8th, that the
20 Commission now schedule another public hearing so
21 that the citizens in Buncombe County could
22 express their desire for this project to move
23 forward? Are you aware of that motion?

24 A I'm aware of that motion, yes.

1 Q And, in fact, if the Commission were to
2 reschedule that hearing, would you want to be the
3 one there addressing the Public Staff's position
4 to those citizens in Buncombe County?

5 A Yes. Yeah, I would definitely support that
6 hearing and would like to attend if I can.

7 MR. KAYLOR: Thank you, Chair Mitchell --
8 thank you, Mr. Thomas, and congratulations on your new
9 addition.

10 That's all the questions I have for the
11 Company.

12 A Thank you.

13 CHAIR MITCHELL: Mr. Little, any redirect
14 for your witness?

15 MR. LITTLE: Just a couple of questions.

16 REDIRECT EXAMINATION BY MR. LITTLE:

17 Q Mr. Thomas, to your knowledge has any individual
18 or entity petitioned the Commission to intervene
19 in this case?

20 A To my knowledge no. I believe the only things
21 that have come through have been consumer
22 statements of position.

23 Q And were there any registrations or requests
24 to -- by the public to testify at the previously

1 scheduled public comment hearing to the best of
2 your knowledge?

3 A No, there were not.

4 Q And wasn't the public hearing, in fact, canceled
5 because there was no registrations for the public
6 to speak?

7 A That's my understanding of why it was canceled.
8 Yes.

9 Q Thank you, Mr. Thomas.

10 MR. LITTLE: That's all I have.

11 CHAIR MITCHELL: Mr. Thomas, the Commission
12 has a few questions for you, and I will begin before I
13 call on my colleagues to see if they have anything
14 additional for you.

15 EXAMINATION BY CHAIR MITCHELL:

16 Q Do you know sort of off the top of your head the
17 average cost of constructing a 5-megawatt solar
18 facility in North Carolina in recent years, like
19 over the past 24 months, for example?

20 A For -- in North Carolina specifically, I do know
21 that I've looked -- my main reference here in
22 terms of installed cost is a Lawrence Berkeley
23 National Lab Report that looks at that. In terms
24 of North Carolina specific, 5-megawatt

1 facilities, that data isn't really there. But
2 North Carolina, in general, those numbers are
3 available in that Lawrence Berkeley Lab Report.
4 And I believe they are a bit lower than the
5 Woodfin facility but I'd have to double check the
6 report data.

7 Q Okay. But in preparing your testimony for this
8 proceeding or preparing for cross examination,
9 you didn't go back and look at numbers that are
10 provided on the CPCN applications for 5-megawatt
11 facilities that have been constructed?

12 A So the CPCN applications that I've reviewed, a
13 lot of those estimates are preliminary and we
14 don't always get fully completed numbers, and
15 often times those estimates are high level --

16 Q Yeah.

17 A -- and you can't really verify the accuracy of
18 those necessarily.

19 Q Okay. Well, I would like for you in a late-filed
20 exhibit to provide us with LBNL numbers,
21 installed cost numbers in North Carolina, and to
22 the extent that those numbers are broken down
23 across regions or locations, by location in North
24 Carolina, please provide that.

1 A Okay. I can do that.

2 Q Okay. The lease that the Company has entered
3 into with Buncombe County, how does the cost per
4 acre compare with similar solar leases across the
5 State, to the extent that you're aware of that?

6 A So DEP stated in their testimony that, and
7 through discovery, that this -- the cost at the
8 landfill site was below market rates and, while I
9 don't have the actual lease rates for other
10 facilities in the region, I take them at their
11 word there that it is a competitive rate, based
12 upon the agreement between Buncombe County and
13 Duke Energy Progress. I would note that there
14 are other facilities in DEP West. According to
15 my review of operating facilities in discovery
16 there are about 54 megawatts of solar,
17 third-party-owned solar operating in the DEP West
18 region. I couldn't say for sure what those lease
19 rates are, but all of those facilities are able
20 to sell their power at the current avoided cost.

21 Q And so we've heard testimony from Duke that there
22 have been discussions between the Company and the
23 County for reducing or eliminating the lease --
24 sort of the leasehold payments due under their

1 arrangement, but is that new information to you?

2 A On that -- that was discussed with -- during the
3 process of writing our testimony we had several
4 conference calls with Duke and that was brought
5 up as an option and then kind of formalized in
6 DEP's rebuttal and then the comments from
7 Buncombe County kind of in support of that
8 notion. But, based upon our analysis, that even
9 the reduction of those lease payments would have
10 a fairly minor effect on the substantial premium
11 that this facility would be generating power at.

12 And, in addition, I just want to
13 point out that this -- that Buncombe County did
14 put out this project for a request for proposals.
15 Duke was one of three companies that bid in, the
16 only regulated utility that bid in and it was
17 selected. According to the Buncombe County's RFP
18 summary, it was selected due to the favorable
19 lease arrangement that they were able to work
20 out. So I think we consider that as, you know,
21 Buncombe County clearly went with Duke and so we
22 may be a bit concerned that in negotiating those
23 lease payments and the REC prices that Duke was
24 not fully accounting for the incremental cost of

1 a facility.

2 Q Okay. Mr. Thomas, I've reviewed your testimony
3 and the testimony of the Company, and I need you
4 to help me understand sort of where the premium
5 comes from. I mean, the testimony of Duke is
6 that the EPC and the -- so now land cost is taken
7 out of this or might be taken out of this deal,
8 EPC is, you know, at market. Why the premium?
9 Help me understand that. And please don't go
10 into confidential information to the extent that
11 you can respond without doing so.

12 A Of course. So first of all, the premium is, as
13 I've said before, the cost of the facility in
14 terms of the levelized cost per megawatt-hour
15 compared to the avoided cost levelized over the
16 life of the project. Much of that cost is coming
17 from the revenue requirement of the facility, the
18 depreciation expense and -- you know, and then
19 there's also operations and management, the
20 operation costs, lease expenses, property taxes,
21 all of that plays into it. Because while the
22 construction cost might be -- you know, Duke
23 claims that those construction costs are
24 reasonable, but with a smaller-sized facility you

1 simply have fewer megawatt hours to spread them
2 over.

3 So I think that generally all
4 things being equal, the levelized cost of
5 electricity from a smaller facility will tend to
6 be higher than the levelized cost from a larger
7 facility. And that's one of the reasons why I
8 point at the Asheville solar facility that Duke
9 has yet to propose. Before we know what the cost
10 is that's already going to be a larger facility.
11 Duke has stated it will be possibly between 9 and
12 10 megawatts. That's even without building on
13 the proposed coal ash landfill. That's only on
14 the cleared space, so the capacity may even be
15 higher but we won't know for sure what that
16 capacity is. And if that facility is going to be
17 10 or more megawatts the LCA will, by nature, be
18 smaller and the premium will be lower. And so I
19 think that my concern here is that by building
20 the Woodfin facility before we truly know it's
21 necessary to meet the 15-megawatt WCMP target,
22 you know, we might be paying -- DEP ratepayers
23 might be paying for a very expensive facility
24 that was never truly necessary.

1 Q Thank you for that response. Mr. Thomas, we've
2 heard -- you know, in this proceeding there has
3 been some discussion of sort of the development
4 of solar generating facilities in the
5 southeastern portion of our state and sort of the
6 lack thereof in the western portion of our state.
7 In other proceedings we've heard testimony from
8 the Public Staff, from the Duke operating
9 utilities as operating companies as well as
10 others about the costs going forward to develop
11 solar facilities in the, particularly, the
12 southeastern region of the State when you look at
13 the sort of the network issues going on there.

14 I mean, is it fair to compare --
15 well two questions really for you: Is it fair to
16 sort of to come up with an average -- let me
17 restate my question just so I'm clear.

18 Should we consider sort of the
19 geographic constraints across our state that
20 exists now when we're evaluating sort of
21 cost-effectiveness of these facilities as we are
22 asked to make these decisions? And so that's
23 question number one. And then question number
24 two is going forward should we expect that the

1 cost of developing solar facilities in the
2 southeastern portion of the State is going to
3 look dramatically different than it has in the
4 past due to the transmission constraints?

5 A Sure. So I'll answer the first to the best I
6 can. So you -- I think that was some of the
7 criticism that DEP and some of the intervenors
8 have said that applying a system-wide avoided
9 cost to the DEP West region is not fair. So I
10 just want to preface it by first saying the
11 5-megawatt solar facility that -- the Woodfin
12 facility is just one component of the existing
13 solar that's already in that state.

14 Like I said, there's already
15 been -- there's already 54, approximately
16 54 megawatts of third-party solar operating and
17 selling under PURPA rates in the DEP West region.
18 So those facilities already exist and are
19 generating power and they were able to sell and
20 remain financially viable at the avoided cost at
21 that time.

22 There's an additional 23 megawatts
23 of solar, most of it rooftop, in the DEP West
24 region that's currently in the interconnection

1 queue. Some of that being rooftop solar might
2 even be supported by the HB589 solar rebates
3 which are being recovered for all ratepayers
4 through the REPS Rider.

5 So the Woodfin facility is not the
6 only solar facility in the region but it is the
7 Duke Utility one that they want to construct.
8 And while I believe that the WCMP Order has
9 weight and the geographical considerations are
10 important to consider, the fact is that this
11 premium is still significant. And the Public
12 Staff's position is that it's simply not, it's
13 not worth it to -- for DEP ratepayers to pay this
14 substantial premium when there's already solar in
15 the region. There will be more solar in the
16 region. And there are other options and venues
17 for Duke to propose solar to meet the WCMP
18 targets that do not consist of simply rate-basing
19 a 5-megawatt facility -- you know, the community
20 solar option being one that I've already talked
21 at length about.

22 So I think that taking those
23 geographic considerations into account -- you
24 know the -- it's understandable that this

1 facility might be producing power at some premium
2 to avoided cost, but this significant premium is
3 simply too high for the Public Staff to
4 recommended approval.

5 As to your second question about
6 cost of solar in the region, particularly in the
7 southeastern portion of the State, I think we've
8 seen that some projects are being -- are
9 requiring significant transmission upgrades to
10 install and some of that has pushed those project
11 costs quite high.

12 I also would point out the CPRE --
13 we just finished Tranche 2 in the CPRE and while
14 most of that capacity is being added in the
15 DEP -- DEC region, there are still projects that
16 are viable in the DEP region. And Duke Energy
17 has released locational guidance in the CPRE
18 Program. And I believe there are as well more
19 granular hosting capacity analysis that they are
20 performing and plan to release to developers in
21 order to help the developers site solar in the
22 southeastern portion of the State without
23 triggering those large upgrades. So I think
24 that, you know, there's still a significant

1 runway for solar capacity to increase in the
2 southeastern part of the State in DEP and DEC's
3 region.

4 Just looking at the IRP's - the
5 2019 IRP update and the 2020 IRP update - there
6 is significant quantities of solar that Duke
7 expects will be added and the transmission cost
8 estimates that they're inputting for those
9 resources, you know, are based on actual
10 transmission costs and some estimates of those
11 costs going forward.

12 So I think if you just site the
13 solar wherever you can get land, I imagine some
14 of these costs are going to be high, but with the
15 significant guidance that Duke has provided for
16 locating those solar sites where there is
17 capacity available, that Duke and likely
18 third-party developers expect that those costs
19 can be minimized.

20 Q Thank you, Mr. Thomas. That's helpful. I
21 appreciate your response to those two questions.
22 Just one follow up then I'll cede to Commissioner
23 Brown-Bland.

24 You referenced 54 megawatts of

1 solar and I assume that's utility scale installed
2 at this time in DEP West. Do you -- and I think
3 you said it was third-party solar; did I hear you
4 correctly?

5 A Yes.

6 Q Okay.

7 A We did -- some discovery we did in the E-2, Sub
8 1185, the Hot Springs Microgrid docket where they
9 provided the third-party solar producers that
10 were selling power under PURPA in that region,
11 and there were approximately 54 megawatts of
12 utility scale.

13 Q And do you know, Mr. Thomas, off the top of your
14 head, sort of the avoided cost vintage, meaning
15 are they selling at 2012 rates or are they
16 selling at 2014 rates --

17 A I believe the majority of those --

18 Q -- or 2010 rates maybe?

19 A I believe the majority of those, subject to
20 check, I think were selling under the Sub 136 or
21 Sub 140 rates.

22 Q Okay.

23 A So certainly higher. I think that most of those
24 had executed contracts in the 2014-2015

1 timeframe.

2 Q And those -- I assume those would be 15-year
3 contracts as well?

4 A Yes. Several of them are 15 years. Yes.

5 CHAIR MITCHELL: Thank you, Mr. Thomas.
6 Commissioner Brown-Bland, anything for
7 Mr. Thomas?

8 COMMISSIONER BROWN-BLAND: No questions for
9 Mr. Thomas.

10 CHAIR MITCHELL: Commissioner Gray.

11 COMMISSIONER GRAY: No questions at this
12 time.

13 CHAIR MITCHELL: Commissioner Clodfelter.

14 COMMISSIONER CLODFELTER: I think yes.

15 EXAMINATION BY COMMISSIONER CLODFELTER:

16 Q Mr. Thomas, I want to do a little hypothetical
17 exercise. I'm not sure where it will end up but
18 let me try it out here. This facility is not a
19 PURPA project, correct?

20 A That is correct, this is not a PURPA project.

21 Q And it's not a CPRE project, is it?

22 A It is not.

23 Q It is one component of a large package of
24 projects, part of the Western North Carolina

1 Modernization Plan, right?

2 A Yes. It's one component -- you know -- but I
3 would just point out that the Legislature passed
4 HB589 following the WCMP Order. And that law
5 completely restructured the way that solar energy
6 would be procured in the State and it really
7 signaled the shift to push those solar costs
8 below avoided cost. And I think we took that
9 into account.

10 Q All right. I understand. But this is part of
11 the WCMP, right?

12 A Yes.

13 Q And the WCMP proposed to replace certain
14 generating assets with a portfolio of replacement
15 generating assets; that's what its purpose was,
16 right?

17 A DEP proposed to replace the coal units with
18 natural gas in a combination of DSM and energy
19 efficiency as well as solar and storage.

20 Q So suppose -- and this is the hypothetical
21 exercise I want to think about. Suppose I were
22 to undertake to try to compare the energy cost
23 per megawatt-hour of the collection of
24 replacement assets, would the energy cost per

1 megawatt-hour of the generation assets that are
2 being replaced, and I wanted to compare them as a
3 comprehensive plan for replacement against a
4 group of assets or an asset that is being
5 replaced, if I undertook that exercise, do you
6 have an opinion about whether the addition of
7 this component to the package that constitutes
8 the plan, the cost, the per megawatt-hour energy
9 cost of the package to exceed the energy cost per
10 megawatt-hour of the assets that are being
11 replaced?

12 A Well, I think that -- first of all, that analysis
13 would be difficult to undertake because we still
14 don't know the size of the cost of the solar
15 facility that Duke intends to construct at the
16 Asheville site. And in its proposal Duke had
17 said that if the Asheville site itself could not
18 be 15 megawatts it would be supplemented with
19 rooftop, community solar, or other utility-scale
20 solar.

21 So in this Woodfin facility I do
22 believe that we are sort of putting the cart
23 before the horse here. We've already got the Hot
24 Springs docket which we approved based upon the

1 additional benefits that it would be providing
2 customers. But until that Asheville site, the
3 final size is determined and we determine whether
4 its economically viable to build on the ash, the
5 coal ash landfill which Duke currently does not
6 intend to do, we really don't know. We can't
7 calculate that -- the cost of energy from the
8 whole package.

9 Q I respect that. You can't do that today and
10 that's a fair answer. But with that said, do you
11 have an opinion about whether this project would
12 put us so close to the tipping point that it
13 would leave insufficient room to develop the
14 additional solar that's part of the package?

15 A So obviously the cost of the combined cycle is
16 much larger than the cost of this facility. So
17 that if you take a weighted average of the energy
18 cost it's not going to change much the cost of
19 those CCs. But, like I said, Duke didn't -- they
20 proposed in their Application to build those CCs,
21 they proposed three other options - rooftop,
22 utility-scale, or community solar, and I feel
23 like Duke has some obligation to seek out ways to
24 reduce the total burden on DEP ratepayers. And

1 in this case I simply don't believe that they
2 took every available option and proposed that
3 community solar or other type of facility.

4 Q The point there as I take it from your answer is
5 that the contribution of this project to the
6 average weighted cost of the package of the
7 Western North Carolina Modernization Project is
8 probably small enough to where it really wouldn't
9 override the cost advantage of replacing those
10 old coal units with the combined cycle gas units?

11 A So I haven't done this analysis. To kind of
12 speculate I would say it's -- you're probably
13 close to accurate.

14 Q Well, I think that's right. So if I look at this
15 as a package of projects and compare them to what
16 they're replacing I'm probably still gonna be
17 much better off than I was.

18 A It's likely. But like I said, if the Asheville
19 site was able to be built and satisfy that 15
20 megawatts along with Hot Springs, this site might
21 not even be necessary at all and we might be able
22 to get more economical energy overall.

23 Q Thank you very much, Mr. Thomas. I appreciate
24 your doing the exercise with me - thank you - as

1 far as we could today, as far as we could. Thank
2 you.

3 COMMISSIONER CLODFELTER: That's all I have.

4 CHAIR MITCHELL: Okay. Commissioner
5 Duffley.

6 COMMISSIONER DUFFLEY: I have no questions.

7 CHAIR MITCHELL: Okay. Commissioner Hughes.

8 COMMISSIONER HUGHES: Yes. At this time I
9 have several.

10 EXAMINATION BY COMMISSIONER HUGHES:

11 Q Mr. Thomas, if I understand correctly, the main
12 criteria threshold that you're using for your
13 cost comparisons is the levelized cost. You
14 mentioned the install cost but most of your
15 calculations are based on the levelized cost; is
16 that correct?

17 A Yeah. That's the comparison that we used in this
18 docket. And the primary reason for that is
19 simply because every other solar facility that's
20 built in this state, whether it be a third party,
21 a QF, or a CPRE participant, or a Duke Energy --
22 you know, a Duke-owned utility like the Woodleaf
23 or Mocksville and Monroe facilities, we look at
24 that avoided cost. That is the benchmark. And

1 no QF, no -- no QF in the State is able to
2 receive more than avoided cost for their solar
3 energy, so we felt it was an appropriate
4 benchmark to use in this case.

5 Q Okay. So does that mean if we did have the cost
6 estimate for the facility, let's say it's 10
7 megawatts at the Asheville, you would use the
8 same criteria -- if that came to us you would use
9 the same levelized cost criteria?

10 A Yeah. I believe that would be one part of our
11 analysis. But like I said, we look at the need,
12 the CPCN, the public convenience and necessity
13 requirement, and we understand that there is some
14 flexibility there. You know, that's why in my
15 testimony -- you know, despite the fact that DEP
16 provided no justification or need for the
17 facility outside of the WCMP Order, we went and
18 took that step of looking at what's the local
19 load growth compared to the region. What are
20 power transfers looking like? Is this energy and
21 capacity needed? Because I think -- you know,
22 you obviously -- if the facility needs a certain
23 type of generation and that need has been
24 identified in the IRP and the orderly capacity

1 expansion process that's established, I think
2 that avoided cost -- litmus test is not
3 necessarily -- you can't always apply that. If
4 you need a certain type of CT that CT is probably
5 going to be producing energy above avoided cost,
6 but if that type of energy is needed the avoided
7 cost metric may not be appropriate.

8 But upon us finding that there was
9 really no need for this project -- you know,
10 unlike Hot Springs which had a deferral of a
11 distribution line and reliability benefits and
12 frequency regulation, you know outside of --
13 without those benefits this is just a solar-only
14 facility and the region simply doesn't need this
15 type of energy. And it's providing no winter
16 morning capacity which is DEP's West planning
17 criteria for now going forward. I think we have
18 tried to apply a flexibility. But certainly,
19 once we found that there was really no need for
20 the facility the avoided cost is what we looked
21 at.

22 Q Well, if I understand you correctly then, how
23 does that jell with the what I understood was a
24 policy directive or maybe it was an aspiration to

1 build 15 megawatts of power, of solar power in
2 this area?

3 A That's a good question. So, you know, we
4 certainly give the WCMP Order weight and we say,
5 you know, look there is a directive that the
6 Commission had in 2016 to build solar and storage
7 in the region. However, as you may know, I
8 testified or I filed testimony in the Hot Springs
9 docket where we also looked at this test. And
10 the Commission came out in their Order in the Hot
11 Springs docket and said that this WCMP is not
12 sufficient to solely justify the public
13 convenience and necessity requirement, there
14 needs to be other -- the facility needs to be
15 justified on its own merits, and that the WCMP is
16 not a blank check as evidenced by the cost cap
17 that was put in place in the Hot Springs docket.

18 So we looked at not only the WCMP
19 Order which directed Duke to file a CPCN, not
20 necessarily just to build it at any cost, and we
21 said that this facility and that Order in
22 conjunction with the Hot Springs Order seemed to
23 clearly layout to us at least that the
24 Commission, that you are expecting Duke to build

1 cost-effective generation.

2 In my opinion, there -- it is
3 likely that the Asheville site will be more
4 cost-effective than the Woodfin site, that it's
5 possible the Asheville capacity could be
6 increased beyond the 9 to 10 megawatts which
7 would render the need for this facility moot.
8 And then we also look for other benefits or other
9 ways to reduce the cost which DEP I believe
10 should have explored or should explore going
11 forward if they want to build this facility.

12 Q Okay. A couple more questions. I'd like to make
13 a slight addition to Chair Mitchell's late filing
14 request with the cost data. I think she asked
15 for the geographical differences or as specific
16 as you can for North Carolina. You might have
17 heard this in her request. But if you could also
18 make whatever information is available based on
19 the size of the facility. So if there is any
20 data of a 5-megawatt facility versus a 10 or
21 versus a 15-megawatt facility that would be quite
22 helpful. Because I think sometimes they lump
23 together 5 to 15, but it would -- if I hear what
24 you're saying you're talking a lot about

1 comparing a 5 to a 10-megawatt facility, so I'd
2 like any insight we could have on that.

3 A Sure. I'll provide that in the report and some
4 of the data tables that we did look at.

5 Q Okay. And you've said -- you know, you used the
6 term "more cost-effective" for this particular,
7 you know, alternative at the Asheville site. If
8 it came in at 20 percent more cost-effective that
9 would still, from an install cost, that would
10 still, doing the math right, would still most
11 likely put it higher than the levelized cost,
12 would you come back with the same request for
13 someone to meet that incremental difference? It
14 would just be a smaller incremental difference to
15 meet.

16 A So I think that's a good question. And it's hard
17 to understand what the premium would be at the
18 Asheville site, you know, without understanding
19 the cost and the maintenance. But I think that
20 there are significant opportunities at the
21 Asheville site for economies of scale to reduce
22 the overall cost of the facility. There's
23 savings just by being on Duke-owned land with
24 maintenance crews and staff already on-site to

1 perform any needed maintenance and that might
2 drive the costs down lower. And, in addition,
3 Duke might even be willing to propose in its
4 Asheville site additional benefits for the
5 facility such as frequency regulation or energy
6 storage to meet winter morning peaks and that
7 type of thing. So I think we look at the
8 significant quantities of solar that are being
9 added in North Carolina at or below avoided cost,
10 and for Duke to propose a solar facility, a
11 solar-only facility with no additional benefits
12 or deferrals or cost savings to ratepayers at a
13 significant premium to avoided cost, we're going
14 to have some heartburn and potentially object to
15 that. But a lot is up to Duke and how they
16 structure and what kind of benefits they
17 anticipate can be provided.

18 Q Well, speaking of the other benefits, if I
19 understand Duke has also mentioned the fact that
20 it's a public/private partnership or it's a -- or
21 a governmental nonprofit unit and it's on a
22 landfill, are you aware of any similar
23 installations across North Carolina of this size
24 on a public or private landfill? I mean, they

1 may exist, I just -- I don't know.

2 A So we explored that a little bit. To my
3 knowledge in North Carolina there is not. The
4 EPA does track solar sites and other renewable
5 energy sites that have been built on, you know,
6 closed landfills and -- of that nature. And I
7 believe it is Duke Energy Indiana has built a
8 site on that -- on a landfill in its territory
9 subject to check. So that database is kept.
10 They have built that in their other territories,
11 but here not so much.

12 And during discovery Duke stated
13 that they have no plans now to build solar on
14 neither a closed coal ash landfill so, you know,
15 when Duke -- and in addition to Marshall, the
16 solar site at the Marshall plant that's built on
17 the coal ash landfill, you know, Duke has said
18 that that is not necessarily comparable to
19 a municipal landfill. And so they already have
20 some experience with that. And so when Duke says
21 that they have this benefit of building on a
22 landfill -- you know, I read their testimony as
23 kind of implying that that would lead to an
24 additional beneficial reuse of landfills. But to

1 my knowledge none of that is really planned or in
2 the works, so I'm a little bit skeptical of that
3 benefit.

4 And certainly, you know, we
5 appreciate the public/private partnership between
6 Duke Energy and Buncombe County. However, we
7 don't oppose, we support these municipalities
8 going for their renewable energy goals, we just
9 feel that the cost of meeting those goals need to
10 be somewhat self-contained and not spread to
11 other DEP ratepayers who many of whom, you know,
12 may not be willing to accept any rate increase.
13 The consumer statements of position I read in
14 rate cases are generally vehemently opposed to
15 rate increases and I have to consider their --
16 those ratepayers' interests as well.

17 Q Okay. You mentioned this, you know, that you
18 support, and it could maybe be a benefit I don't
19 know, the governmental public/private nature.
20 Are you aware -- same question as far as the
21 landfills, are you aware of any facility of this
22 scale, you know a 5-megawatt facility in this
23 kind of partnership with a local government given
24 again this potential future demand by local

1 government? Do you know if there are any of
2 these facilities in other parts of the State?

3 A Yeah, I mean, I do. For example, one I can point
4 to is the City of Charlotte entered into a Green
5 Source Advantage Agreement with a private solar
6 developer to develop I believe -- I'm not -- I
7 don't know the exact megawatts and it might be
8 confidential, but I think they've applied for a
9 decent sized solar facility and went through the
10 GSA. We also have -- HB589 also established --
11 first of all, there's additional capacity in the
12 GSA Program that's still available.

13 HB589 established community solar
14 options for private entities that want to
15 purchase and invest in renewable energy. There
16 is also the solar leasing and the solar rebate
17 programs which allow private entities to enter
18 into these types of arrangements to facilitate
19 the renewable energy goals.

20 So I see many avenues for towns
21 like, you know, Durham and Buncombe County and
22 Asheville who have set these renewable energy
23 goals. I see many venues for them to meet those
24 goals within already existing programs. Another

1 is the Renewable Energy Advantage Program for
2 nonresidential customers where RECs can be
3 purchased directly. So I certainly see many
4 venues that exist outside of this particular
5 project, which appears to shift those incremental
6 costs to other ratepayers as opposed to
7 containing them within the entity that proposed
8 them.

9 Just as an aside, I know Duke is
10 proposing this facility to satisfy the WCMP and
11 also to work with Buncombe County, but I would
12 note is that Buncombe County put this proposal
13 out for a bid, an RFP, and Duke was only one of
14 three entities that bid in, and they were
15 selected largely due to their favorable lease
16 terms. And I'm sure there's some advantage
17 Buncombe County has with working with Duke. But
18 the fact that two other entities bid in and were
19 rejected in favor of the Duke proposal, it
20 just -- it hints to me that those proposals,
21 those private proposals might have been viable,
22 but Duke was able to propose more favorable terms
23 made possibly due to the WCMP and their ability
24 to rate base the asset.

1 Q Okay. Well, the part about the public/private
2 partnership option was very helpful. If you --
3 have you -- if you have a list of ones that you
4 thought were comparable or that you did for your
5 research, if we could have the late filing just
6 of, of just several of those that you -- you
7 mentioned the Charlotte one, but anything else
8 that you're aware of and that you noted as
9 options. A lot of what you said I think you said
10 were -- could be determined. But if there is
11 anything that's in place that would be helpful.

12 Last question. Back to the cost
13 premium. I heard earlier from one of -- from the
14 Duke witness that the earliest that the site
15 could be built on the Asheville site was, I think
16 it was 2023 or 2024. I don't recall now but it
17 was one of those. That would I think put it into
18 the 10 percent ITC rate. Whereas, I think what
19 they are saying with this facility is that it
20 could be built in time to qualify for I think the
21 22 percent ITC rate. I know it's kind of
22 complicated how the tax credit works when you
23 rate base it, but have you looked at what that
24 disincentive, how that would compare versus this

1 premium of scale.

2 So, in other words, I think out of
3 the gate it's going to have a lower tax credit,
4 but then you've offered up some potential
5 savings. Have you done any kind of analysis
6 looking at what it would take as a
7 cost-effectiveness premium to overcome that loss
8 of that 12 percent incremental federal tax
9 credit?

10 A That's a good question. I haven't directly
11 performed that analysis to test what a lower ITC
12 would provide. I think that we start to get kind
13 of speculative there. You know, we really don't
14 know what the alternate fate of the ITC is or
15 other energy-related incentives that might appear
16 in the future in the next five years or so.

17 So I think you are certainly
18 correct in that a lower ITC is going to make this
19 facility generally more expensive, you know, and
20 particularly Duke's requirement to normalize that
21 tax credit is also, puts it at a disadvantage to
22 a third-party solar who can claim that in a
23 faster fashion. But that would, I think, be a
24 maybe a good question for Duke to kind of see if

1 they've run those numbers, but I imagine it would
2 have some impact.

3 Q Okay. And then -- this might be a question for
4 Duke. But assuming that they -- I think they
5 have said they at least would be willing to
6 continue to discuss the community solar. Would
7 your feeling change about the community solar if
8 the planning -- or the planning time for that
9 project pushed it out of the ITC window as well?
10 And I don't know if that's the case or not. I
11 mean I can ask that to the Duke witnesses. But
12 would that change your favored review about going
13 community solar if they said they could do it to
14 get the higher ITC?

15 A You know -- so it is -- it's true that if this
16 facility is pushed out it's going to get a lower
17 tax rate, which would increase the premium that
18 subscribers would be asked to pay, but I couldn't
19 really speak too much to kind of what that impact
20 would be. But I do know that this program was --
21 the HB589 was signed into law in 2017, and the
22 community solar program Duke was working on that
23 throughout 2018, and I believe it may have been
24 approved in 2019. So I think that, you know, we

1 obviously can't go back in time but this
2 community solar option in this region was
3 something that Duke proposed in 2016 when it
4 first filed for the Asheville CCs. It
5 specifically highlighted community solar as a
6 potential option to meet that commitment. And so
7 I feel that Duke may have -- Duke should have
8 been considering that as an option when
9 developing this program and it appears that they
10 kind of did not. And now here we are at this
11 stage asking if we go community solar will it
12 increase costs. I think that we should have been
13 pushing that and that should have been an option
14 in the runup to this in the development of this
15 project.

16 But, you know, that premium that
17 ratepayers would pay if they were to subscribe --
18 if this were restructured as community solar,
19 that premium that ratepayers would pay it will be
20 some sort of premium based upon the cost of the
21 facility. But we also have to consider the
22 significant community support for this project.
23 Obviously not every one who sent an email into
24 the docket would necessarily pay a monthly

1 premium to support this project. But I feel that
2 there's some correlation between the high levels
3 of community support and people that might be
4 willing to pay a few extra dollars a month for a
5 community solar subscription to support this
6 project.

7 Q Thank you very much for all of your time.

8 COMMISSIONER HUGHES: No further questions.

9 A Thank you.

10 CHAIR MITCHELL: Commissioner McKissick.

11 COMMISSIONER McKISSICK: Thank you, Madam
12 Chair. I do have a few questions.

13 EXAMINATION BY COMMISSIONER McKISSICK:

14 Q Mr. Thomas, do you attach any value to the
15 uniqueness of this project being constructed on a
16 municipal landfill site and the reuse potential
17 of this being done in a way that it hasn't been
18 done before by Duke?

19 A So obviously it's hard to put a dollar value on
20 that. I will say that in the past, particularly
21 looking at the Hot Springs facility, we did
22 attach some qualitative value to Duke Energy
23 getting experience integrating a hot grid -- a
24 microgrid and integrating battery storage. So I

1 think that we considered that in terms of the
2 landfill. But through discovery Duke indicated
3 that they have no current plans to build new
4 solar on landfills. And, in addition, they have
5 already built a small site at the Marshall coal
6 ash landfill so they already have some experience
7 in ballasted racking systems which were required
8 at that landfill.

9 I understand that a municipal
10 landfill and a coal ash landfill have slightly
11 different requirements and there are
12 complications there, but we didn't see that that
13 experience gained by building on a municipal
14 landfill was worth the significant premium that
15 this facility would incur to other DEP
16 ratepayers.

17 Q And let me ask you this, you mentioned ballasted,
18 you know, system going in as the foundation that
19 goes on the top of the landfill rather than
20 penetrating the soil and the cap, did you project
21 what the additional cost might be of this
22 particular facility based upon them using a
23 ballasted system?

24 A Just to tease out that particular cost --

1 Q That particular component of the cost because
2 that is clearly a unique component as opposed to
3 it -- you know, it's laying on top of the ground
4 as opposed to penetrating into the ground and
5 going I guess potentially into the cap, from what
6 I understand; is that correct?

7 A Yeah, that's correct. So, no, we did not attempt
8 to kind of tease that out. I think that the EPC
9 bid that I reviewed that Duke had gained didn't
10 really tease that out either, so we didn't make
11 that attempt to kind of differentiate what if
12 this was just a hill instead of a landfill, but
13 I'd imagine that had some impact. But Duke might
14 be the better witness to kind of speak to that
15 impact. But we didn't see that it would
16 necessarily reduce the cost of this facility
17 below the significant premium that's already
18 being incurred. And in any case that cost
19 increase from the ballasted system, we're not
20 necessarily convinced that that is worth the
21 experience that Duke states that it's going to
22 gain from overseeing an EPC contract on a
23 landfill.

24 Q Is that information information that you feel

1 like you could obtain and provide in a late-filed
2 exhibit?

3 A That would probably -- that's not something that
4 I can necessarily tease out with the data that I
5 have already requested through discovery, but
6 Duke witnesses may be able to make an estimate of
7 that in a late-filed exhibit. But I would have
8 to perform additional discovery to Duke to get
9 that information.

10 Q Okay. Now, you mentioned the community solar
11 route as being one that would affect the
12 economics of the project. Now, if Duke were to
13 go the community solar route, wouldn't that
14 impact the way the Renewable Energy Certificates
15 would be potentially treated or sold?

16 A Yes, it would. And I did address that that in my
17 testimony, a potential work-around for that where
18 those RECs could be purchased after-the-fact by
19 Buncombe County.

20 Q Okay. Now, but if you go the community solar
21 route, don't the community solar have kind of the
22 first dibs on them so to speak?

23 A Yes. In the existing community solar docket, the
24 program as proposed, you know, Duke would simply

1 retire those RECs on behalf of the consumers but
2 the customers are given the option to retain them
3 themselves. And so I believe I would envision
4 any community solar option is kind of giving
5 ratepayers the option to retire the RECs if they
6 so chose while also giving them the option to
7 offset some of their premium through a -- through
8 selling those RECs to Buncombe County.

9 Q And without revealing any confidential
10 information, is it possible to share what you
11 project the economic impact would be if Buncombe
12 County was to acquire the Renewable Energy
13 Certificates at what you might consider to be
14 their fair market value?

15 A If I -- sorry. Let me just make sure I
16 understand the question you're asking. If I have
17 kind of -- if I put in the fair market value for
18 RECs what would that -- would that reduce the
19 incremental cost enough to --

20 Q That is exactly what I'm trying to obtain.

21 A Sure.

22 Q If you have actually performed that analysis to
23 see what the projected cost would be as it
24 relates to this project, since that appears to be

1 a significant concern of the Public Staff.

2 A Yeah. So I think it's clear that the actual
3 incremental cost of these RECs is likely outside
4 Buncombe -- it's stated in DEP's rebuttal that
5 they are not going to be able to pay that full
6 incremental cost.

7 I did some analysis of different
8 REC prices. And, you know, in the Hot Springs
9 docket DEP estimated a certain value for RECs.
10 In the recent rider, REPS Rider dockets we have
11 additional estimates for RECs. Depending on how
12 RECs are procured from the open market, they can
13 range in value from a dollar to \$5.00 or even
14 more, depending on the mix that's gained.

15 I think that obviously the higher
16 value that Buncombe County would be paying for
17 the RECs the lower the premium. But in any case
18 the substantial premium is too high for even --
19 even if we chose a high-end REC estimate of \$4.00
20 or \$5.00, I think that that is probably -- it's
21 not going to reduce that significant premium
22 enough to the point where we would be okay with
23 this solar-only facility to be producing power at
24 well above avoided cost.

1 Q So let me ask this, so if the RECs were sold at
2 what you might consider to be fair market value
3 to Buncombe County, Public Staff would still
4 be opposed to the project as it's presently being
5 considered; is that correct?

6 A Yes. I believe that the premium is simply too
7 high for a fair market value of the RECs to be
8 overcome. And that's just another item of
9 concern here, in general, is that the price that
10 DEP itself pays for RECs is significantly higher
11 than -- that it commonly pays for RECs for
12 its REPS compliance is significantly higher than
13 the current market value, mostly due to legacy
14 and older projects under high avoided cost rates.
15 But we also recognize that if Buncombe County --
16 if all Buncombe County wanted was RECs they could
17 have bought their RECs through the Renewable
18 Advantage Program that Duke currently offers.
19 They could have bought their own RECs on the open
20 market. But this facility is simply operating at
21 too high of a premium to be offset by only a fair
22 market value for the REC prices.

23 Q Okay. I understand your explanation. But when I
24 look at your testimony on page 19, it seems to be

1 somewhat in conflict; however, it gets into a
2 part of your confidential testimony so perhaps
3 that might be addressed more appropriately on the
4 phone line at some further point and time. But
5 I'm specifically looking at page 19 of your
6 testimony, beginning on line 19 and continuing
7 over to page 20, going over to page -- to line 3
8 or so. If there is some way you can comment on
9 that without getting into confidential
10 information, please help me reconcile that with
11 what you just stated.

12 A So I think that there's -- the way that the
13 traditional definition of the REC price in North
14 Carolina under SB3 has been that, you know, the
15 cost of facility over avoided cost, that
16 incremental cost is the REC price and that is
17 independent of any voluntary market, market price
18 for RECs. So I think asking for -- I'm trying to
19 avoid confidential -- but there's just a
20 fundamental difference there between when we
21 talked about the market price RECs and the
22 incremental price of this facility, which under
23 North Carolina Parliament the incremental price
24 is the REC price. And so that's where they kind

1 of conflict, it is there.

2 Q Okay.

3 A I don't know if that resolves it.

4 Q It doesn't in my mind.

5 A Okay.

6 Q I mean it's challenging, too, because of course

7 you do refer there to full incremental costs.

8 But if the full incremental costs were reflected

9 in the RECs I take it Public Staff might have a

10 different position?

11 A I'm sorry. Can you just state that again?

12 Q Yes. If the full incremental cost of the RECs

13 was something Buncombe County was paying in this

14 particular case, would Public Staff's position be

15 different?

16 A Yes. Absolutely. Because that would mean that

17 the DEP ratepayers would only be paying avoided

18 cost for the facility and in that case the DEP

19 ratepayer and the Public Staff would kind of be

20 indifferent whether that energy came from this

21 facility or from a DEP system so I think that --

22 yeah, that would certainly change our position

23 there.

24 Our main concern is the

1 significant premium that DEP customers as a
2 whole, not just in DEP West but in DEP East as
3 well, they're going to be paying a premium for
4 the energy produced from this facility that is
5 going to be displacing much -- you know, very
6 high, high-cost solar is going to be displacing
7 much lower-cost system energy. And that's really
8 our concern is that just as if DEP had entered
9 into a contract with a QF under PURPA to pay them
10 a significant premium to the avoided cost rates
11 at the time, I think the Public Staff would also
12 have an objection there because that violates
13 that kind of ratepayer indifference -- stances.

14 Q And I guess my follow up would be this. We
15 recently conducted evidentiary hearings as well
16 as hearings we received public comment in the DEP
17 rate case which is still pending. Do you recall
18 there being public comment received in Asheville
19 in the DEP case where people were commenting upon
20 solar and their openness or willingness to pay
21 somewhat more for solar if it were in fact
22 instituted more wide-scale as a part of DEP's way
23 of generating electricity?

24 A Sure. There are hundreds of consumer statements

1 of position and so I couldn't necessarily recall
2 which of those came from the DEP West region
3 versus the DEP East region. But my takeaways
4 from reading these community solar -- these
5 updates are, yes, a desire for more renewable
6 energy. However, most of those calls for more
7 renewable energy were coupled with statements
8 claiming that the renewable energy is actually
9 cheaper than system energy and that solar energy
10 could be procured at costs well below coal and
11 natural gas. And while I think that that is
12 certainly the case that we look at larger scale,
13 or even some smaller scale facilities procured
14 under the Competitive Procurement of Renewable
15 Energy Program, for example, there was a seven, I
16 believe a 7-megawatt facility procured under that
17 that was procured under avoided cost. I think we
18 have to take those with an understanding that
19 many of those consumer statements also called
20 against any rate increase at all. So I think
21 that there's some conflict there with calling for
22 more renewable energy that's purportedly cheaper
23 than system cost while at the same time not
24 wanting any rate increases at all. And I think

1 that this Woodfin facility is contrary to all of
2 that. It's going to increase rates. It's going
3 to impose a premium. And it's clearly more
4 expensive than energy produced from a combined
5 cycle plant or similar in the region.

6 COMMISSIONER McKISSICK: Thank you, Madam
7 Chair. I don't have any further questions at this
8 time.

9 CHAIR MITCHELL: We are going to take a
10 break for our court reporter. We will go off the
11 record. We will go back on -- we'll be back on at
12 11:40.

13 (A recess was taken at 11:29 a.m.,
14 until 11:40 a.m.)

15 CHAIR MITCHELL: Let's go back on the
16 record, please.

17 Duke, questions on Commissioners' questions?

18 MR. KAYLOR: Thank you, Chair Mitchell.
19 Just a couple of questions for Mr. Thomas.

20 EXAMINATION BY MR. KAYLOR:

21 Q Mr. Thomas -- am I ready to go? Am I okay?

22 A I'm here.

23 Q Oh, there you are. You were asked some questions
24 by Chair Mitchell about the average cost for a

1 5-megawatt solar in Western North Carolina. And
2 you were also -- you mentioned that there were
3 54 megawatts of solar in, I think you said in
4 Western North Carolina, but you did indicate that
5 they were probably in under the -- a stale
6 avoided cost rates from the 136 and maybe the 140
7 docket; is that correct?

8 A That's correct. Yes.

9 Q You were also asked some questions about the
10 lease. And you do have a copy of the letter
11 dated November 10th from the County, I believe,
12 which indicates that the County would be willing
13 to essentially waive the lease payments if this
14 project were to go forward; is that correct?

15 A I'm sorry. November 10th? What letter are you
16 referring to?

17 Q From Buncombe County to the docket.

18 A I see additional comments on the 17th; is that
19 what you're referring to?

20 Q I was referring to the November 10th letter from
21 Buncombe County. I'll just read the last
22 paragraph. It says *we have reviewed the concerns*
23 *raised by the Public Staff and are willing to*
24 *help address them. The County is willing to*

1 *essentially waive the lease payments of the*
2 *retired landfill site to address the concerns*
3 *addressed by the Public Staff. Is that correct?*

4 A Yes. Yeah, I've got that in front of me. I do
5 see that. Like I stated in my testimony, the
6 waiving of that lease cost would not
7 significantly reduce that substantial premium.

8 Q And you seemed to express a lot of concern about
9 the Public Staff has about the cost of solar in
10 North Carolina. You know I've been coming to the
11 Monday agenda conferences for years and for the
12 past it seems like five to seven years we have
13 these CPCN applications before the Commission. A
14 lot of them are for 5-megawatt projects and have
15 been. And I don't recall the Public Staff ever
16 really raising a concern about the cost of any of
17 those projects. Do you recall raising any
18 concern about any of those projects that were
19 approved on the Monday agenda?

20 A I've only dealt with several -- some of those
21 projects. But I will say that each of those
22 projects is -- most of those projects, if not
23 all, are CPCNs for qualified facilities which
24 will sell their power to a regulated utility

1 under PURPA and those facilities will not receive
2 any -- a dollar more than the applicable avoided
3 cost that's in place at that time. And so I
4 don't understand why we would raise an issue
5 there because there is no incremental cost of
6 those facilities.

7 Q Okay.

8 A In addition, we've also -- I would just add on a
9 little bit. The Public Staff has taken a
10 position in many previous dockets such as avoided
11 cost in the Green Source Advantage Docket and
12 many others that, you know, the avoided costs
13 have dropped overtime and we are concerned with
14 applying stale rates to new facilities. Anytime
15 we review a CPCN or a PURPA dispute or a contract
16 or a CPRE price cap, we always look at the
17 applicable avoided cost at that time.

18 Q And I don't think you raised any concern about
19 the potential for overloading distribution
20 circuits in eastern North Carolina with regard to
21 these numerous projects that are before the
22 Commission; is that correct?

23 A We have raised -- we have raised concerns about
24 overloading a distribution system and consuming

1 available distribution capacity but that's
2 primarily in the North Carolina interconnection
3 proceeding, procedural proceedings. Generally
4 that's where we raise those concerns.

5 In addition, the Legislature and
6 the North Carolina General Assembly has clearly
7 shown through its reduction in terms for PURPA
8 facilities and the reduction in the maximum size
9 for Standard Offer Contracts that they desire to
10 see those smaller facilities kind of held to a
11 shorter term, possibly lower rates, and be forced
12 to refresh those rates at a
13 sooner-than-it-used-to-be as well as negotiated
14 contracts for larger facilities being reduced to
15 five years. And so I think that we look at the
16 General Assembly's concerns there. And the fact
17 that avoided cost rates for particularly larger
18 facilities than one megawatt are refreshed every
19 five years, I think that goes a long way to
20 protecting ratepayers from potentially
21 overpaying.

22 Q So I think you've indicated that there was a
23 potential for more solar in Western North
24 Carolina. Are there any CPRE winning projects in

1 the DEP West service area that you're aware of?

2 A No, there are not.

3 Q And I thought you said something about House Bill
4 589, did you indicate that in essence House Bill
5 589 canceled the WCMP and made it --

6 A I don't believe that it canceled the WCMP but I
7 think that conditions change all the time in the
8 energy regulatory space. For example, we just
9 saw that the FERC has revised some terms of the
10 1978 PURPA law, you know, allowing different
11 payments to be made and the way that payments are
12 calculated. I don't think that that means that
13 the FERC has canceled PURPA, I think that it just
14 changed the way it's possibly implemented, and I
15 think that applies here. HB589 did not cancel
16 the WCMP but it certainly showed the General
17 Assembly's general intent on where we'd like to
18 see the cost of solar goes. And it also
19 provided, as I stated before, many other
20 opportunities for communities to build on their
21 local renewable energy goals. And it also
22 formalized the community solar program which Duke
23 had originally proposed in its Asheville CC
24 Application as one potential method of meeting

1 its WCMP Order. So I'm not exactly sure why Duke
2 decided against pursuing the community solar
3 option that it proposed in 2016, but I do believe
4 it to be viable and I would like to see Duke
5 explore that.

6 Q Well, are you suggesting that House Bill 589
7 supersedes the WCMP?

8 A No, I'm not. I just believe that they have to be
9 taken together. And HB589 has changed the energy
10 landscape in North Carolina considerably and I
11 think ignoring it and just simply looking at the
12 WCMP Order in a vacuum is inappropriate.

13 We need to consider all of the
14 Commission's Orders as well, including the Hot
15 Springs dockets where in the Hot Springs Order
16 the Commission clearly stated that the WCMP
17 itself, by itself is not sufficient to justify
18 the need for the facility, the public convenience
19 and necessity requirement must still be met, and
20 that the Commission expects Duke to pursue
21 cost-effective projects.

22 So I think if we, if we're talking
23 about taking everything in holistically, we have
24 to consider the WCMP Order with the Hot Springs

1 Orders with HB589 with the way that the energy
2 landscape has changed since the WCMP Order was
3 issued.

4 Q Thank you, Mr. Thomas.

5 MR. KAYLOR: Chair, that's all the questions
6 I have.

7 CHAIR MITCHELL: Mr. Little.

8 MR. LITTLE: Yes. Just one question for
9 Mr. Thomas.

10 EXAMINATION BY MR. LITTLE:

11 Q Mr. Thomas, do you know off the top of your head
12 are there other 5-megawatt solar facilities that
13 have been built in North Carolina that are at or
14 below the avoided cost rate?

15 A Yes. There are many of those facilities, some of
16 them in the DEP West region. And there was -- I
17 don't know what their costs were necessarily but
18 I know that they are not being paid more than the
19 avoided cost rates that were in place at the time
20 they executed their legal enforceable obligation.

21 MR. LITTLE: Thank you. That's all I have.

22 CHAIR MITCHELL: All right. Mr. Little,
23 I'll entertain a motion from you.

24 MR. LITTLE: Yes. We would move that

1 Mr. Thomas' testimony and exhibit be admitted into the
2 record.

3 CHAIR MITCHELL: Hearing no objection to
4 your motion, exhibit one to Mr. Thomas' prefiled
5 testimony will be admitted into evidence.

6 (WHEREUPON, Thomas Exhibit 1 is
7 received in evidence.)

8 CHAIR MITCHELL: And with that, Mr. Thomas,
9 you may step down.

10 (The witness is excused)

11 MR. JIRAK: Chair Mitchell, if I may.

12 CHAIR MITCHELL: Mr. Jirak, you may.

13 MR. JIRAK: Thank you. Chair Mitchell, I
14 believe there had been a request for a late-filed
15 exhibit from you regarding construction costs for
16 5-megawatt projects. Along that same vein, with your
17 permission, we'd like to request the ability to
18 provide a late-filed supplemental exhibit showing some
19 of the information that was asked regarding where
20 these projects are located in western North Carolina
21 and the applicable avoided cost rates under which
22 these projects are being compensated and any other
23 relevant details that the Commission may want to know
24 there. Would that be acceptable to the Commission for

1 Duke to provide that?

2 CHAIR MITCHELL: Yes. You may provide that
3 information, Mr. Jirak.

4 MR. JIRAK: Okay. Thank you very much,
5 Chair Mitchell.

6 CHAIR MITCHELL: All right.

7 MR. LITTLE: Chair Mitchell, Mr. Thomas has
8 made various references to the Hot Springs Order. I'd
9 like to ask the Commission to take judicial notice of
10 that Order which is Docket Number E-2, Sub 1185.

11 CHAIR MITCHELL: Mr. Little, would you
12 please provide the date of the Order just for purposes
13 of the record?

14 MR. LITTLE: May 10th of 2019, Your Honor.

15 CHAIR MITCHELL: Okay. The Commission will
16 take judicial notice of the Order as requested by the
17 Public Staff.

18 Any additional matters before we proceed
19 with Duke's rebuttal? Duke, you may call your
20 witnesses.

21 MR. JIRAK: Thank you, Chair Mitchell. At
22 this time DEP would like to call to testify the panel
23 of Lawrence Watson and Todd Beaver. Chair Mitchell, I
24 believe Mr. Watson has previously offered his

1 affirmation. Please proceed with Mr. Beaver.

2 LAWRENCE WATSON;

3 having been previously affirmed,

4 and

5 TODD BEAVER;

6 having been duly affirmed,

7 testified as follows:

8 CHAIR MITCHELL: You may proceed, Mr. Jirak.

9 MR. JIRAK: Thank you, Chair Mitchell.

10 DIRECT EXAMINATION BY MR. JIRAK:

11 Q Once again, Mr. Watson, if you will just please,
12 for formality sake, please state your full name
13 and title for the record, starting with
14 Mr. Watson.

15 (Pause)

16 Mr. Watson, you may be on mute. I
17 see your video, Mr. Watson.

18 A (Mr. Watson) Oh, I'm sorry. Lawrence Watson,
19 Director of Distributed Asset Commercial
20 Development. Thank you.

21 Q Thank you, Mr. Watson. And, Mr. Beaver, would
22 you please state your full name and title for the
23 record?

24 A (Mr. Beaver) Todd Beaver, Director of Regulated

1 Renewables, Analytics and Structuring.

2 Q Thank you, Mr. Beaver.

3 Mr. Watson, along with Mr. Beaver,
4 did you prepare and cause to be filed in this
5 proceeding rebuttal testimony in question and
6 answer format?

7 A (Mr. Watson) Yes.

8 A (Mr. Beaver) Yes.

9 Q Mr. Beaver, did you assist in the preparation of
10 that testimony?

11 A Yes.

12 Q Do either of you have any changes that you need
13 to make to your testimony at this time?

14 A (Mr. Watson) No.

15 A (Mr. Beaver) No.

16 Q Mr. Watson, if I were to ask you the same
17 questions contained in your testimony today,
18 would your answers remain the same?

19 A (Mr. Watson) Yes.

20 Q Now, Mr. Beaver, one procedural note, if you'll
21 mute until you answer questions. Thank you.
22 It's a little awkward but it helps the audio.

23 (WHEREUPON, due to the audio
24 feedback, the Court Reporter

1 requested Mr. Jirak to repeat his
2 last statement.)

3 MR. JIRAK: Yes, we will. Sorry about that.

4 Q Mr. Watson -- to reask that question --
5 Mr. Watson, if I were to ask you the same
6 questions contained in your testimony today,
7 would your answers remain the same?

8 A (Mr. Watson) Yes.

9 Q Thank you. And again, Mr. Beaver, if I were to
10 ask you the same questions contained in your
11 testimony today, would your answers remain the
12 same?

13 A (Mr. Beaver) They would.

14 Q Thank you.

15 MR. JIRAK: Chair Mitchell, at this time I'd
16 request that the prefiled rebuttal testimony of the
17 panel of Lawrence Watson and Todd Beaver be copied
18 into the record as if given orally from the stand.

19 CHAIR MITCHELL: Hearing no objection to
20 your motion, Mr. Jirak, it will be allowed.

21 MR. JIRAK: Thank you, Chair Mitchell.

22 (WHEREUPON, the prefiled rebuttal
23 testimony of LAWRENCE WATSON and
24 TODD BEAVER is copied into the

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record as if given orally from the
stand.)

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1257

In the Matter of)
Application of Duke Energy Progress, LLC)
for A Certificate of Public Convenience and)
Necessity to Construct a Solar Generating)
Facility in Buncombe County, North)
Carolina)

**REBUTTAL TESTIMONY OF
LAWRENCE WATSON AND TODD
BEAVER**



1 **Q. MR. WATSON, PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Lawrence Watson, and my business address is 400 South Tryon Street,
3 Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed as Director of Distributed Asset Commercial Development by Duke
6 Energy Business Services LLC. Duke Energy Business Services LLC is a service
7 company affiliate of Duke Energy Progress, LLC (“DEP” or “Company”). Duke
8 Energy Progress is a wholly owned, indirect subsidiary of Duke Energy Corporation
9 (“Duke Energy”).

10 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?**

11 A. Yes.

12 **Q. MR. BEAVER, PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

13 A. My name is Todd Beaver, and my business address is 400 South Tryon Street,
14 Charlotte, North Carolina 28202.

15 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

16 A. I am employed as Director of Regulated Renewables Analytics and Structuring by
17 Duke Energy Carolinas, LLC, a wholly owned subsidiary of Duke Energy. In this
18 role, I also provide support to other Duke Energy regulated electric subsidiaries,
19 including DEP.

20 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?**

21 A. No.

22 **Q. WHAT IS THE PURPOSE OF THE PANEL’S REBUTTAL TESTIMONY?**

1 A. The purpose of our rebuttal testimony is to respond to the testimony of Public Staff
2 witness Jeff Thomas.

3 **Q. MR. WATSON, PLEASE SUMMARIZE THE PANEL'S REBUTTAL**
4 **TESTIMONY.**

5 A. As the Commission is well aware, the Woodfin Solar Project is one piece of the
6 Western Carolinas Modernization Project ("WCMP"), which was approved by the
7 Commission in its March 28, 2016 *Order Granting Application in Part, With*
8 *Conditions, and Denying Application in Part* ("WCMP Order"). In the WCMP
9 proceeding, the Commission considered DEP's comprehensive plan to retire the
10 1960s-era Asheville coal units and replace them with a combination of new natural
11 gas generation, at least 15 MW of new solar generation and 5 MW of new battery
12 storage in the Asheville area, and to establish a collaborative community effort to
13 delay or eliminate the need for an additional contingent new combustion turbine
14 ("CT") unit through innovative and aggressive energy efficiency and demand side
15 management efforts. The Company's plan received substantial public and community
16 support and was approved by the Commission as required by the public convenience
17 and necessity (with the exception of the contingent CT unit). On page 38 of its WCMP
18 Order, the Commission emphasized its expectation that DEP would honor its
19 commitment to develop new solar generation in the Asheville area and unequivocally
20 instructed the Company as follows:

21 The Commission commends the work that DEP has begun in engaging
22 Asheville community leaders to work collaboratively on load
23 reduction measures. The Commission shall require DEP to continue
24 to update it on these efforts, along with its efforts to site solar and
25 storage in the western region. As to solar and storage, the Commission
26 expects DEP to file as soon as practicable the CPCN to construct at

1 least 15 MW of solar at the Asheville Plant or in the Asheville region.
2 The Commission further urges DEP to move forward in a timely
3 manner with the 5 MW storage project in the Asheville region. To the
4 extent DEP does not do so, the Commission reserves the right on its
5 own motion or on the motion of any interested party to investigate
6 DEP's decision not to move forward with its representations.
7

8 Pursuant to the Commission's directive in the WCMP Order, the Company has
9 developed and presented to the Commission the Woodfin Solar Project. The Woodfin
10 Solar Project represents a continuation of the collaborative efforts that were an
11 important component of the WCMP, as was noted by the Commission in its WCMP
12 Order. By working with Buncombe County to site and develop the project, the
13 Company is carrying out both the letter and spirit of the WCMP Order through a
14 collaboration that will facilitate a solar project that is reasonably-priced in light of the
15 overall circumstances and will also allow the Company to gain valuable experience in
16 the construction and maintenance of a utility-scale solar project on a closed landfill.

17
18 The WCMP overall, and this public/private partnership with Buncombe County,
19 specifically, is aligned with a strategy that represents a collaborative and innovative
20 way to support the investment in increasing renewable energy resources that is broadly
21 supported by the community. In addition, this project allows for adaptive reuse of a
22 landfill site, minimizes new environmental and land use impacts, is being built at a
23 competitive capital cost, and has broad community-wide support. The Woodfin Solar
24 Project reflects the overall goals of the WCMP, and in particular, the on-going and
25 positive collaboration between DEP and the broader community to develop a
26 reasonably-priced solar project in a region of the state in which utility-scale solar

1 development is very limited. We are pleased with the community support for the
2 Woodfin Solar Project, which is affirmed in the consumer statements of support filed
3 with the Commission in this docket and further described in the testimony of our
4 colleague, Jason Walls.

5
6 In the face of nearly universal support, the Public Staff's disappointing opposition to
7 this renewable project, as set forth in Witness Thomas' testimony, essentially "moves
8 the goalpost" by focusing solely on system-level avoided cost as the measuring stick
9 for assessing the public interest rather than assessing the overall benefits of the project
10 within the larger context of the WCMP. Such an approach is not supported by the
11 terms of the WCMP Order, is not reasonable given the parameters of the
12 Commission's directive in the WCMP, was not identified by any party in the WCMP
13 proceeding as a limiting factor and is not consistent with the "elastic" nature of the
14 public convenience and necessity standard.

15
16 Stated plainly, if the Commission adopts the Public Staff's approach to assessing the
17 project, not only will the Woodfin Solar Project not be constructed, but DEP will be
18 unable to fulfill its commitments and the Commission's express direction in the
19 WCMP Order to construct at least 15 MW of new solar generation at the Asheville
20 Plant site or in the Asheville region. The Woodfin Solar Project is entirely consistent
21 with the terms and expectations of the WCMP Order, is a reasonably-priced project
22 in light of the overall context of the WCMP, and should be found to be in the public
23 interest.

1 **Q. IS THE WOODFIN SOLAR PROJECT COST-EFFECTIVE?**

2 A. Yes, the Woodfin Solar Project is cost-effective given the parameters of the
3 Commission's directive in the WCMP Order. Under the WCMP Order, the Company
4 was directed to site and construct smaller solar generating projects in an area of the
5 state that is not conducive to the lowest cost solar development. Under those
6 parameters, the Company has delivered a cost-effective project that has market-
7 competitive equipment and construction costs and below-market land cost (and
8 potentially no land cost as is discussed below).

9
10 If the Commission had simply desired the lowest possible cost solar resources (on an
11 LCOE basis), then it would have directed the development and construction of larger
12 scale resources in areas of the state that are more favorable to utility-scale solar
13 generating facilities. But that was not the intent of the WCMP Order. Instead, the
14 WCMP Order directed the development of a particular-sized resource in a particular
15 part of the state that has not experienced any meaningful development of utility-scale
16 solar generation, and the Company has fulfilled that directive in a cost-effective and
17 collaborative manner. Witness Thomas' testimony focuses solely on the project costs
18 relative to avoided cost and ignores the broader context of the WCMP. While avoided
19 costs is an important tool for assessment of customer impact, it should not be
20 dispositive in the unique context of the WCMP.

21 **Q. PLEASE DISCUSS FURTHER HOW THE WCMP ORDER INFORMED**
22 **THE COMPANY'S APPROACH TO THE WOODFIN SOLAR PROJECT.**

23 A. The WCMP Order contemplated an overall framework for collaborating with

1 stakeholders throughout the region and deploying smaller utility-scale solar
2 generating facilities in the Asheville area. Working within those parameters will
3 necessarily constrain the Company's ability to deliver a project that is below avoided
4 cost on an LCOE basis. But the question to be answered in this proceeding is not
5 whether the Woodfin Solar Project is or is not below avoided cost, but whether the
6 Company has delivered a reasonably cost-effective project in light of the parameters
7 of the WCMP Order. The Company contends it has met this requirement.

8 **Q. HOW HAS DEP COMPLIED WITH THE WCMP ORDER'S NEW SOLAR**
9 **GENERATION REQUIREMENT?**

10 A. The Commission has already approved CPCNs for the 10 kW (DC) solar generation
11 component of the Mt. Sterling Microgrid project and the 2 MW (AC) solar generation
12 component of the Hot Springs Microgrid project as consistent with the WCMP Order.
13 The Company's plan is to fulfill the remaining new solar requirements of the WCMP
14 Order through the Woodfin Solar Project and a new solar generation project to be sited
15 at the location of the former Asheville coal plant.

16 **Q. DID THE COMMISSION'S WCMP ORDER REQUIRE THAT THE SOLAR**
17 **PROJECTS BE AT OR BELOW AVOIDED COST?**

18 A. No.

19 **Q. HAD THE COMMISSION LIMITED THE WCMP SOLAR PROJECTS TO**
20 **AVOIDED COSTS, WOULD THE COMPANY HAVE PURSUED ANY**
21 **PROJECTS?**

22 A. Had the Commission required that the 15 MW of solar generation to be sited as part
23 WCMP be developed at current avoided cost, DEP would likely not have pursued

1 development.

2 **Q. WHY IS THAT THE CASE?**

3 A. There are a number of factors that combine to make development of solar projects
4 within the context of the WCMP Order more challenging, including primarily: project
5 size and availability of suitable land. First, larger projects will always be more cost-
6 effective on an LCOE basis due to economies of scale. This is why, for instance, the
7 CPRE winning projects (including Duke projects) have all been much larger projects
8 on sites more ideally suited for solar development. Second, identifying suitable sites
9 is particularly challenging due to the dearth of sites to support larger solar projects and
10 the higher land costs in the Asheville area versus other areas of the state. Additionally,
11 site characteristics in this region are particularly challenging due primarily to
12 topography and rocky subsurface conditions that is much less favorable to larger-scale
13 solar development. As the Commission is well aware, land costs and topography have
14 been a major factor that have driven immense amounts of solar development in the
15 Southeast portions of the DEP territory. There is reason few utility-scale solar projects
16 have been sited to date in the Asheville area. Given all of these factors, the Company
17 would likely have concluded that development of smaller solar projects at a price near
18 or below current avoided cost was simply not feasible under the parameters.

19
20 Apart from the general challenges of solar project development in the Asheville area,
21 the substantial downward trend of avoided costs since the date of WCMP Order has
22 further increased the challenges of delivering this project below avoided cost on an
23 LCOE basis. While it is not our area of expertise, the Company clearly supports the

1 need to adjust avoided costs over time to reflect market and cost realities. But we do
2 not believe that avoided cost should be the sole determinant of the public interest in
3 this particular proceeding. Furthermore, the Company notes that it may be appropriate
4 and more equitable to assess the LCOE of the Woodfin Solar Project against the
5 projected avoided costs that were in place at the time of the WCMP Order, which
6 would be analogous to the PURPA legally enforceable obligation construct pursuant
7 to which hundreds of smaller solar projects in the DEP service territory “locked in”
8 older avoided costs even though construction was delayed to future periods in which
9 avoided costs had been revised downward substantially. An older, higher avoided
10 cost would naturally place substantial downward pressure on the incremental costs.

11
12 It should be also noted that under a different set of circumstances, DEP has been able
13 to provide projects that compared more favorably to avoided costs. Specifically,
14 previous DEP projects (Warsaw, Camp Lejeune, Elm City and Fayetteville) were
15 forecast to be cost effective against the then current avoided cost projections, which
16 were substantially higher than current avoided cost projections. In addition, these
17 projects were larger, located in Eastern North Carolina, and were eligible for the now
18 expired NC Energy Tax Credit, which substantially decreased the LCOE for those
19 projects. Importantly, the NC Energy Tax Credit had expired prior to the WCMP
20 Order and, therefore, it would have been understood at that time that, all things being
21 equal, subsequent projects would have a higher LCOE.

22
23 Publicly available data also confirms a large LCOE differential between smaller solar

1 projects and larger solar projects. For instance, Lazard's market data concerning
2 LCOE shows a range of \$63 - \$94 per MWh for smaller community solar projects and
3 a range of \$31 - \$42 for larger projects.

4
5 In summary, the overall parameters of the WCMP Order make it nearly impossible
6 for the Company to develop projects below current avoided cost. These challenges
7 were also reflected in the economics of the solar portion of the approved Hot Springs
8 project, which actually has a higher LCOE than the Woodfin Solar Project.

9 **Q. IN THE CONTEXT OF THE WCMP ORDER AND THE WESTERN**
10 **CAROLINAS MODERNIZATION PROJECT, IS THE PUBLIC INTEREST**
11 **SYNONYMOUS WITH BEING BELOW AVOIDED COST?**

12 A. No. While neither of us is an attorney, we understand that neither the WCMP Order
13 nor the Commission's CPCN framework require that a project must be below avoided
14 cost in order to be deemed to be consistent with the public convenience and necessity.
15 While projected avoided costs are certainly an important data point for evaluating
16 projects in this and many other regulatory contexts, it should not be the sole
17 determinant in the context of the WCMP. We also note that the Commission stated
18 in its WCMP Order that "[t]he standard of public convenience and necessity is relative
19 or elastic, rather than abstract or absolute, and the facts of each case must be
20 considered." In fact, the WCMP Order further noted that among other factors, the
21 Commission should consider "the extent, size, mix and location of the utility's
22 plants...the construction costs of the project." Based on this guidance, we do not

1 believe that a one-size fits all comparison against avoided cost is consistent with the
2 WCMP Order.

3

4 We believe that the Woodfin Solar Project is in the public interest in light of the
5 WCMP Order and the fact that the project provides unique diversity in the Company's
6 generating fleet by allowing development of a solar project in an area of the state in
7 which such development is often challenging. There is overwhelming support in the
8 community for the Woodfin Solar Project, just as there was overwhelming support for
9 additional renewables generation at the WCMP public hearing and consumer
10 statements of position filed in the WCMP docket. The WCMP Order recognized
11 DEP's commitment to site at least 15 MW of new solar generation at the Asheville
12 plant site or in the Asheville region as part of its commitment to a smarter, cleaner
13 energy transition. In addition, the EPC (engineering, procurement and construction)
14 costs have been demonstrated to be reasonable and Public Staff has not alleged that
15 such costs are not in line with market prices. Finally, it is also worth noting that the
16 Commission approved the Hot Springs project even though it was above avoided cost
17 and, in fact, the solar portion of the Hot Springs project actually had higher
18 incremental costs than the Woodfin Solar Project.

19 **Q. PLEASE DESCRIBE THE ACTIONS TAKEN BY THE COMPANY TO**
20 **DELIVER THIS PROJECT AT A REASONABLE COST GIVEN THE**
21 **CIRCUMSTANCES.**

22 A. The Company has taken steps to ensure that two of the largest cost items—EPC and
23 land—are as low as possible. First, the site itself is a unique opportunity in a number

1 of respects. The Company searched throughout the target area and identified the
2 Woodfin site as optimal site in numerous respects. In addition to the benefit of
3 working collaboratively with Buncombe county, the Woodfin site is ideal in that: (1)
4 the site is on a municipal landfill and zoned for industrial land use and has
5 approximately 30 acres of relatively flat, buildable area on one parcel, (2) the
6 acreage is sufficient for siting multiple MW of solar generation (3) the point of
7 interconnection is located adjacent to the planned project and on the same property
8 and does not require additional land rights or permitting to access the
9 interconnection facilities; (4) the site is not adjacent to residential customers; (5)
10 the site has minimal new environmental impact and does not require tree clearing
11 to support the solar; and (6) the site is owned by a single landowner willing to enter
12 into a lease agreement in support of the project and community's goals. The current
13 lease cost is below market for land in the Asheville area and, as discussed below,
14 may be even lower. In addition, the Company has already secured an
15 interconnection agreement with relatively low costs.

16

17 With respect to the capital cost for the project, DEP conducted a competitive bid
18 process that solicited proposals for all of the major components and the engineering,
19 design and construction of the project. The results from the bid process served as
20 the basis of the cost estimate to support this Application and the EPC contract, once
21 executed, will be a firm, fixed price contract. Finally, DEP will continue to work
22 diligently to work towards optimizing the system production and driving our
23 partners to the lowest possible cost for this facility. In summary, the capital costs

1 for the project, having been established through a competitive process, are
2 reasonable and in line with the capital costs for other projects.

3 **Q. PLEASE PROVIDE ADDITIONAL DETAILS REGARDING THE**
4 **EQUIPMENT AND CONSTRUCTION COSTS FOR THE PROJECT.**

5 A. Once again, DEP conducted a competitive bid process that included soliciting cost
6 proposals for all of the major components and construction of the project to ensure the
7 lowest cost for our customers. DEP sent the RFP to eight solar EPC firms that have
8 demonstrated solar development and construction expertise. As part of the analysis
9 of the bids received, DEP requested and evaluated component pricing in order to
10 evaluate the major component costs (panels, inverters, racking systems) to ensure that
11 the proposed pricing was consistent with market price information. DEP has short-
12 listed the bidders based on pricing proposed and relevant project experience and will
13 continue to work with the selected EPC contractor(s) to refine the engineering plans
14 to optimize energy production, leverage additional procurement savings and drive
15 down overall project costs through the negotiation process.

16 **Q. PLEASE PROVIDE ADDITIONAL DETAILS REGARDING THE LAND**
17 **COSTS FOR THE PROJECT.**

18 A. In addition to the unique topographical benefits of the land, the land cost is below
19 market for the Asheville area. Simply stated, the Company's collaboration allowed
20 the Company to utilize a site that was well situated for solar generation development
21 and with below market land cost.

22 **Q. WHAT ACTIONS HAS THE COMPANY TAKEN IN RESPONSE TO**
23 **PUBLIC STAFF'S RECOMMENDATIONS CONCERNING THE**

1 **PROJECT?**

2 A. The Company's more detailed response to the Public Staff's recommendations is
3 provided below, but the Company did engage with Buncombe County subsequent to
4 the Public Staff's testimony in order to dialogue concerning Public Staff's
5 recommendations regarding the treatment of the RECs. While Public Staff's
6 recommendation was not acceptable to Buncombe County, the Company and
7 Buncombe County have preliminarily discussed the following two potential
8 alternative arrangements: (1) amend the ground lease agreement such that the value
9 imputed to the RECs would equal the annual lease obligation and (2) amend the lease
10 agreement such that DEP retains the RECs from the Woodfin Solar Project and then
11 separately agrees to procure RECs for Buncombe County at market prices to be
12 deducted from the lease.

13

14 Under Option #1, the Company would effectively be able to lower its land costs to \$0,
15 further affirming that the project is cost-effective for the region. Under Option #2, the
16 land costs would still be below market but customers could retain the RECs from the
17 Woodfin Solar Project.

18

19 Once again, these options have only been preliminarily discussed and will require
20 formal consideration and approval by the Buncombe County Commission. But the
21 options simply reinforce the cost-effectiveness of the project given the parameters of
22 the WCMP Order.

23 **Q. WITNESS THOMAS STATES THAT "PUBLIC STAFF DOES NOT**

1 **BELIEVE THAT THE WCMP ORDER DIRECTS DEP TO BUILD SOLAR**
2 **AND STORAGE IN THE ASHEVILLE REGION AT ANY COST.” HAS THE**
3 **COMPANY TAKEN THAT POSITION?**

4 A. Absolutely not. As explained above, the Company has taken a comprehensive
5 approach to delivering this project in the most cost-effective manner given the context
6 of the WCMP Order. As previously stated, the WCMP Order identified a finite
7 amount of solar to be developed in that region. The small scale of development in the
8 WCMP Order limits overall cost exposure to consumers while providing the unique
9 benefits of this project. Furthermore, the Company has gone to great lengths to
10 minimize the costs so as to ensure the prudence of the project on behalf of all
11 customers and in accordance with the WCMP Order.

12 **Q. IS IT REASONABLE TO COMPARE THE LCOE COST OF THE WOODFIN**
13 **PROJECT TO THE PPA COST OF WINNING CPRE PROJECTS?**

14 A. No. Once again, a smaller project developed in the Asheville area will not be able to
15 compete on an LCOE basis with a larger CPRE solar project. The larger scale projects
16 associated with the CPRE are being built under more ideal site conditions and
17 recognize economies of scale and therefore do not serve as a reasonable comparison
18 to smaller, DG solar sites and pricing, especially on sites developed in the Greater
19 Asheville region. In fact, it is instructive to note that none of the winning CPRE
20 projects have been located in DEP West.

21 **Q. MR. BEAVER, PLEASE EXPLAIN THE PRIMARY FACTORS THAT**
22 **INFLUENCE THE LCOE COST OF THE WOODFIN PROJECT.**

23 A. There are numerous factors that have an impact on the LCOE cost of the Woodfin

1 Project including: capital costs, tax normalization, and tax credits. Generally
2 speaking, operations and maintenance expenses and property taxes have a relatively
3 minimal impacts on the LCOE in comparison with EPC costs and tax credits / tax
4 treatment.

5 **Q. PLEASE EXPLAIN HOW TAX NORMALIZATION IMPACTS THE LCOE**
6 **OF THE WOODFIN PROJECT.**

7 A. When using cost of service rate making, DEP is required by federal tax law to
8 normalize or spread the benefits of the Investment Tax Credit (“ITC”) ratably over the
9 life of the asset. This reduces the impact of the tax credits in the annual revenue
10 requirement as compared to a flow-through of the full ITC value concurrent with when
11 they are utilized by Duke Energy.

12 **Q. MR. WATSON, PLEASE EXPLAIN ADDITIONAL BENEFITS OF THE**
13 **PROJECT.**

14 A. Deployment at this location will allow the Company to gain experience owning and
15 operating a solar facility on a landfill site owned by a critical customer. While
16 developing solar on a landfill can have an impact on costs due to the inability to
17 penetrate the landfill cap, the size, and other positive site characteristics balance
18 overall project costs and limit local environmental impacts. The Woodfin Solar
19 Project will allow DEP to continue to expand internal experience, knowledge, and
20 capabilities. Landfills are typically areas that are already disrupted and cleared with
21 existing buffers to adjacent properties. Solar generators on landfills are an excellent
22 adaptive reuse for this type of land that otherwise has very limited use after closure.
23 Advancing the understanding of how to optimally develop, construct, own, and

1 operate a landfill solar project will provide experience to hopefully reduce
2 development and design costs and minimize construction risk for similar future
3 projects on coal ash or municipal landfills.

4 **Q. PLEASE HIGHLIGHT THE BENEFITS OF THE PARTNERSHIP WITH**
5 **BUNCOMBE COUNTY.**

6 A. As stated, finding available sites within the Asheville region that can support a solar
7 facility of this scale, has immediate access to interconnection, limits environmental
8 impacts (such as tree clearing and wetland disturbance) is challenging given
9 topography and high land costs in the Asheville region. During the siting process,
10 DEP was made aware that Buncombe County was interested in making its site
11 available for solar development to both facilitate the directives of the WCMP Order
12 and support the County's renewable energy and climate change goals. This
13 opportunity and partnership with Buncombe County reflects the collaborative nature
14 of the WCMP to identify creative and innovative solutions to site solar in a
15 challenging region of the State. The Woodfin Solar Project reflects the goals of the
16 WCMP, supports Buncombe County in realizing its community-wide goals and
17 reflects DEP's commitment to proactively support our customers and their energy-
18 related goals and objectives.

19 **Q. PLEASE COMMENT GENERALLY ON THE THREE SCENARIOS**
20 **SUGGESTED BY PUBLIC STAFF REGARDING THE PROJECT.**

21 A. Public Staff recommended three potential scenarios under which it asserts that the
22 issuance of a CPCN might be reasonable. However, two of the suggestions, which
23 are addressed in turn below, do not represent a meaningful alternative. The third

1 suggestion remains under consideration by the Company but would require a
2 fundamental restructuring of the lease.

3 **Q. PLEASE RESPOND TO THE PUBLIC STAFF'S FIRST SUGGESTION**
4 **THAT DUKE SHOULD FOREGO RECOVERY OF THE PORTION OF THE**
5 **COST OF THE FACILITY THAT EXCEEDS AVOIDED COSTS.**

6 A. This is a completely unreasonable suggestion. No reasonable investor would make
7 an investment knowing at the outset that it will be unable to recover a substantial
8 portion of its investment.

9 **Q. PLEASE RESPOND TO THE PUBLIC STAFF'S SECOND SUGGESTION**
10 **THAT BUNCOMBE COUNTY SHOULD BE REQUIRED TO PAY A REC**
11 **PRICE FAR ABOVE CURRENT MARKET PRICES.**

12 A. Once again, Public Staff's suggestion is completely unreasonable. Witness Thomas'
13 suggestion does not comport with market realities of solar RECs pricing and
14 therefore is not a meaningful alternative. Buncombe County understands the market
15 price for NC-generated RECs is far below this amount and would likely pursue the
16 purchase of RECs as a less expensive alternative, but the preference was to make its
17 land available to support local solar generation as part of the WCMP. As stated in the
18 testimony and responses to the Public Staff additional questions, the Site Lease
19 Agreement in its entirety (*i.e.*, the combined impact of the lease rate and REC
20 treatment) results in a gross and net lease rate far below the market rate for land in this
21 region.

22 **Q. DOES APPROVAL OF THE WOODFIN SOLAR PROJECT MEAN THAT**
23 **CUSTOMERS WILL BE REQUIRED TO PAY HIGHER COSTS TO ALLOW**

1 **“MORE AND MORE MUNICIPALITIES AND LOCAL GOVERNMENTS”**
2 **TO ACHIEVE RENEWABLE ENERGY GOALS AS IS IMPLIED BY**
3 **WITNESS THOMAS?**

4 A. No. The Woodfin Solar Project has been proposed in connection with the clearly
5 defined 15 MW target established by the WCMP Order, and therefore, it is
6 unreasonable to suggest that approval of this particular project will necessarily lead to
7 many other similarly situated projects. The Company has sought to implement the
8 Commission’s directive in the WCMP Order in a reasonable manner. Should the
9 Commission or the Company ever determine that additional local government
10 collaborations are in the public interest in the future, such collaborations can be
11 evaluated on their own merits at the appropriate time. But opposing this project on
12 the basis of a vague concern about future local government projects is unreasonable
13 in light of the limited and clearly defined scope of the WCMP Order.

14 **Q. DOES THE WOODFIN SOLAR PROJECT “LACK MARKET DISCIPLINE”**
15 **AS ASSERTED BY PUBLIC STAFF?**

16 A. Absolutely not. The Company has taken reasonable steps to ensure that the project is
17 cost-effective given the parameters of the WCMP Order. The EPC costs of the
18 project—which are by far the most substantial cost component of the project—have
19 been obtained through a competitive process that delivered prices that are in line with
20 other project costs. Public Staff has not introduced any evidence that such costs are
21 not consistent with market or somehow not subject to “market discipline.” Similarly,
22 the land costs for the project are also below market and, depending on the outcome of
23 further negotiations with Buncombe, may actually be \$0.

1

2 In light of the fact that the Commission has limited the WCMP directive to only 15
3 MW of solar and that the Company has used “market discipline” at each phase of the
4 development of this project, the Woodfin Solar Project is a reasonable project
5 consistent with the WCMP Order and reasonably limits overall customer impacts.

6 **Q. PLEASE RESPOND TO THE PUBLIC STAFF’S THIRD SUGGESTION**
7 **THAT THE WOODFIN FACILITY SHOULD BE UTILIZED FOR**
8 **COMMUNITY SOLAR PROGRAM.**

9 A. In light of the current project structure and lease agreement with Buncombe County,
10 this suggestion is not feasible. House Bill 589 requires that community solar
11 customers have the option to own the RECs produced by the community solar energy
12 facility. However, as described in the Application, the RECs from the Woodfin Solar
13 Project will be conveyed to Buncombe County under the terms of the lease, which
14 was a critical piece of the overall lease agreement. The Company has discussed such
15 an arrangement with Public Staff but more analysis is needed to assess the feasibility
16 and moreover, an amendment to the lease agreement between DEP and Buncombe
17 County would require approval by the Buncombe County Commission which is not
18 guaranteed. To the extent that the Company is able to identify a feasible community
19 solar arrangement, the Company will re-engage with Public Staff and evaluate
20 whether to offer any further proposal for the Commission’s consideration.

21 **Q. PLEASE COMMENT REGARDING DISCOVERY ISSUES IN THIS**
22 **PROCEEDING.**

23 A. More than four dozen data requests (not including subparts) were issued by Public

1 Staff, and the Company responded to each and every request and in some cases, at the
2 request of Public Staff, responded in much shorter timelines than is typical. The
3 Company also made itself available for an informal discussion with Public Staff. The
4 Company disagrees that Public Staff did not receive “sufficient information to fully
5 evaluate the inputs utilized by the Company.” Moreover, there is no basis in
6 Commission practice for one party to be granted discovery above and beyond that
7 permitted under the Commission’s discovery guidelines simply because of one party’s
8 subjective judgment that it has not received “sufficient” information. Such a standard
9 would essentially render the discovery guidelines and timelines irrelevant. The
10 Company worked extraordinarily hard to provide timely and complete responses to
11 all Public Staff data requests and in many cases did so in an expedited manner. The
12 Company also provided the Public Staff with a copy of the revenue requirements
13 model with instructions such that Public Staff would have the ability to run any desired
14 alternative scenarios or sensitivities. Therefore, there is no basis or need for further
15 discovery.

16 **Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**

17 A. Yes, it does.

1 MR. JIRAK: At this time I would ask with
2 your leave that the panel be permitted to provide a
3 summary of their testimony.

4 CHAIR MITCHELL: Please do so, gentlemen.

5 A (Mr. Watson) Thank you, Chair Mitchell and
6 Commissioners. Our rebuttal testimony responds
7 to the testimony of public (sic) witness Mr. Jeff
8 Thomas.

9 Once again, the Woodfin Solar
10 Project fulfills both the letter and the spirit
11 of the Commission's WCMP Order through a unique
12 partnership with Buncombe County that is broadly
13 supported by the community at large. As a result
14 of this partnership, the Company has identified
15 an ideal site at which the Company is able to
16 site a 5-megawatt site in the Asheville area at
17 below market land cost while also gathering
18 further experience and knowledge concerning the
19 construction and operation of a solar generating
20 facility on a closed landfill.

21 The WCMP overall, and this
22 public/private partnership with Buncombe County,
23 specifically, is aligned with a strategy that
24 represents a collaborative and innovative way to

1 support investment in increasing renewable energy
2 resources in an area of the State that has lagged
3 other areas of the State in terms of solar
4 development. In contrast, Public Staff's
5 assessment of the public interest in this
6 proceeding is nearly entirely focused on the
7 measuring stick of current avoided costs. Yet
8 such a myopic focus on current avoided costs
9 ignores both the greater context of the WCMP and
10 the Commission's recognition of the elastic
11 nature of the public convenience and necessity
12 standard.

13 The Company acknowledges that the
14 cost of the project as measured on a levelized
15 cost of energy basis is higher than avoided costs
16 and, further, agrees that avoided costs are an
17 important tool to be considered in this and other
18 regulatory policy contexts. But relying solely
19 on current avoided costs to assess whether this
20 project is in the public interest is simply not
21 reflective of the Commission's WCMP Order, which
22 sought to modernize the Company's electric supply
23 in Western Carolinas, including through the
24 development of renewable resources. Nowhere in

1 the WCMP Order or in the underlying proceeding
2 did the Commission or any party identify avoided
3 cost as a sole benchmark of the public interest.
4 Instead, the Company was directed to develop
5 smaller solar resources in an area of the State
6 whose topography and land prices are not
7 conducive to the lowest cost solar resources.
8 The Commission certainly could have directed the
9 Company to simply develop the lowest cost solar
10 resources at or below avoided costs regardless of
11 the area of the State, but that would have not
12 been consistent with the intent of the WCMP.
13 Instead, the Commission directed the development
14 of solar resources under certain parameters that
15 aligned with the region's broad support for the
16 development of new renewable resources.

17 Therefore, the question to be
18 answered in this proceeding is not whether the
19 Woodfin Solar Project is or is not below current
20 avoided cost, but whether the Company has
21 delivered a reasonably cost-effective project in
22 light of the parameters of the WCMP Order. And
23 the answer to that question is a definitive yes.

24 As it relates to those factors

1 that are within the Company's control, the
2 Company has taken reasonable steps to ensure
3 cost -- to ensure a cost-effective project.
4 Take, for instance, the capital cost of the
5 project. On a percentage basis, the largest cost
6 by far of any solar project is the engineering,
7 equipment and construction costs. In the case of
8 the Woodfin Solar Project, the engineering,
9 equipment and construction costs represent almost
10 90 percent of the total cost of the project. The
11 construction costs for this project have been
12 obtained through a competitive process and, as I
13 have testified, are consistent with current
14 market prices. In fact, when measured on a
15 capital cost basis, the Woodfin Solar Project is
16 more cost-effective than other solar projects
17 previously approved by the Commission. In the
18 same vein, the partnership with Buncombe County
19 has allowed the Company to obtain a below market
20 lease rate for a property in the Asheville area
21 and, in fact, may allow the Company to access the
22 site at no cost. Finally, the site identified by
23 the Company is well-situated from an
24 interconnection perspective, which will allow the

1 project to interconnect at a relatively low cost
2 and without any foreseeable complexity or
3 interconnection challenges.

4 In contrast, the most substantial
5 factors contributing to the delta between LCOE
6 and avoided costs are outside of the Company's
7 control. For instance, as the Commission is well
8 aware from its regulatory oversight, there has
9 been a substantial drop in avoided cost since the
10 WCMP Order due to numerous complex factors. Once
11 again, it is certainly appropriate for avoided
12 costs to be updated over time to reflect market
13 realities but it is not appropriate to back-cast
14 those updated avoided costs in a manner that
15 constrains the ability of the Company to fulfill
16 the directives of the WCMP Order, particularly
17 given that the Commission itself did not impose
18 such a parameter in its Order. Similarly, the
19 tax treatment of the project, namely the
20 requirement that the Company normalize the
21 investment tax credits, is outside of the
22 Company's control but materially contributes to
23 the LCOE delta on the Woodfin Solar Project. But
24 as it relates to those factors that are in the

1 Company's control, the Company has delivered a
2 cost-effective project.

3 Once again, the Woodfin Solar
4 Project is broadly supported in the community, as
5 reflected in the scores of supportive letters
6 filed in this docket. Notably, in light of the
7 Public Staff's opposition, two of the intervenors
8 in the underlying WCMP proceeding - MountainTrue
9 and Sierra Club - have requested a rescheduling
10 of the public hearing in order to allow further
11 support for the project to be heard. Buncombe
12 County also filed a second letter in this
13 document -- this docket, sorry, noting that the
14 Woodfin Solar Project is part of a complex, broad
15 agreement for future energy generation in a
16 specific region that involved numerous trade-offs
17 by all parties and that commitment to 15
18 megawatts of solar in the Asheville area was a
19 key part of obtaining community support for the
20 WCMP. Buncombe County further noted that it
21 hoped that the Woodfin Solar Project can move
22 forward so Buncombe County can begin planning and
23 implementing other elements of our regional clean
24 energy strategy and that disapproval of this

1 project would be a major step backwards for our
2 efforts.

3 In conclusion, Chair Mitchell and
4 Commissioners, DEP is proud of the Woodfin Solar
5 Project that has been presented for the
6 Commission's consideration in this proceeding.
7 The project is entirely consistent with the terms
8 and expectations of the WCMP Order, is broadly
9 supported by the community, will be constructed
10 at a competitive capital cost, is
11 reasonably-priced in light of the overall context
12 of the WCMP, and should be found to be in the
13 public interest.

14 Q Thank you, Mr. Watson.

15 MR. JIRAK: Chair Mitchell, the witnesses
16 are available for cross examination.

17 CHAIR MITCHELL: Mr. Little.

18 MR. LITTLE: The Public Staff has no
19 questions for this panel, Your Honor.

20 CHAIR MITCHELL: Gentlemen, there are
21 several questions from Commission Staff, so I'll begin
22 and then I'll cede to my colleagues.

23 EXAMINATION BY CHAIR MITCHELL:

24 Q But in your testimony, page 20 specifically, you

1 discuss the Public Staff's recommendation related
2 to rearranging or restructuring this project to
3 fit into the community solar model, and your
4 testimony indicates that you all will reengage
5 with the Public Staff on that issue. Have you
6 all reengaged with the Public Staff and, if so,
7 where are you in the process?

8 A (Mr. Watson) Thank you. I'm sorry. I was trying
9 to find that document. Yes. We have had a
10 subsequent conversation with the Public Staff
11 about the concept of community solar. During
12 that conversation, however, with the Public
13 Staff, we did mention that we have also had to
14 have conversations with Buncombe County to
15 discuss the potential to revising the lease
16 agreement as the treatment of RECs associated
17 with that lease agreement are an integral part of
18 the overall lease agreement. And any adjustment
19 to that lease agreement would have to be approved
20 by the entire Board of Commissioners for Buncombe
21 County and that approval is not guaranteed.

22 Q Okay. So just following up there, I mean, should
23 the Commission hold on making a decision on this
24 Application until we hear from the Company

1 additional information on your efforts related to
2 community solar?

3 A I think the -- Commissioner, I think the intent
4 would be to proceed with this filing as is at
5 this point and not bog down the proceedings with
6 community solar.

7 CHAIR MITCHELL: Thank you. Commissioner
8 Brown-Bland, questions from you?

9 COMMISSIONER BROWN-BLAND: No, I have no
10 questions.

11 CHAIR MITCHELL: Commissioner Gray.

12 COMMISSIONER GRAY: No questions.

13 CHAIR MITCHELL: Commissioner Clodfelter.

14 COMMISSIONER CLODFELTER: Nothing from me.
15 Thank you.

16 CHAIR MITCHELL: Commissioner Duffley.

17 COMMISSIONER DUFFLEY: No questions.

18 CHAIR MITCHELL: And Commissioner Hughes.

19 Commissioner Hughes, is that nothing from you? I
20 think you were muted maybe.

21 COMMISSIONER HUGHES: I was double muted.
22 Sorry. No questions.

23 CHAIR MITCHELL: Thank you, sir.
24 Commissioner McKissick.

1 COMMISSIONER McKISSICK: One or two quick
2 questions, Madam Chair.

3 CHAIR MITCHELL: Okay.

4 EXAMINATION BY COMMISSIONER McKISSICK:

5 Q One of the things that you spoke about was the
6 uniqueness of building this particular facility
7 on a municipal landfill and lessons that can be
8 learned from that. Could you speak to the
9 distinctions between building this on a municipal
10 landfill as it is versus building this on say
11 some other type of landfill where you might have
12 had coal ash there previously or whatever? But
13 help me understand the uniqueness and what can be
14 learned from this particular project that Duke
15 has not been able to learn from other projects
16 it's pursued.

17 A (Mr. Watson) Yes, sir. I can answer that
18 question. So this project on a landfill
19 represents an adaptive reuse of a site that
20 otherwise would be un-developable for other
21 potential uses. I think it's adequately suited
22 to support solar in this case, particularly in
23 this part of the State we're finding suitable
24 flat land that can support a solar facility of

1 this scale is scarce in that region.

2 Specific to building on a
3 municipal landfill, while that has been -- while
4 those types of developments have occurred kind of
5 throughout the United States, particularly in the
6 northeast of the country, we don't see a lot of
7 municipal landfills that have been developed in
8 the Carolinas. I'm not familiar with any other
9 municipal projects at this time of this scale
10 certainly.

11 There are some differences in how
12 those facilities will be built and operated. And
13 I think that again as an adaptive reuse, this
14 could be a good path forward to additional solar
15 development within the State of North Carolina.

16 When it comes to coal ash
17 landfills, those landfills are fairly dense and
18 so you won't have a lot of settlement or
19 subsidence, if any, on those facilities. On a
20 municipal landfill you will have some various
21 degrees of settlement and subsidence on those
22 landfills due to the nature of the underlying
23 trash degrading over time and so you'll see a
24 shifting of that -- of those soil conditions.

1 And so building a facility on a landfill like
2 that with racking that can accommodate that type
3 of settlement and subsidence is good experience,
4 again, if we're going to look to continue to make
5 investments utilizing or reutilizing our
6 landfills, municipal landfills.

7 Also, there's treatment of
8 existing methane gas of those landfills and so
9 building facilities around those methane venting
10 mechanisms or structures or piping at those
11 locations, again, provides an opportunity for us
12 to understand how these facilities can operate in
13 concert with the closure permits and the closure
14 of these landfills and can give us a good, both
15 construction and operating, experience in the
16 longterm on these types of municipal landfills.

17 Q Has Duke explored the possibility of looking at
18 other municipal landfills elsewhere in North
19 Carolina as potential sites for solar generating
20 facilities separate and apart from what you're
21 looking at here in Buncombe County?

22 A (Mr. Watson) Commissioner, I think I didn't hear
23 the first part of your question. I'm sorry.

24 Q Sure. (Inaudible)

1 (WHEREUPON, the Court Reporter
2 advised that she could not hear
3 Commissioner McKissick.)

4 COMMISSIONER MCKISSICK: You can't hear me
5 either?

6 CHAIR MITCHELL: So, Commissioner McKissick,
7 just start from the top. Ask your question again,
8 please, sir.

9 COMMISSIONER MCKISSICK: Sure. Can you hear
10 me now? Okay. Very good.

11 BY COMMISSIONER MCKISSICK:

12 Q The question was simply this. At this time has
13 Duke explored possibilities for siting say solar
14 generating facilities on municipal landfills
15 anywhere else in North Carolina in terms of
16 potential sites that might have been looked at,
17 evaluated, or where information that could be
18 obtained from this facility if it were approved
19 could be, you know, utilized?

20 A (Mr. Watson) Okay. Thank you for your question.
21 We have looked at other potential sites, other
22 potential landfills throughout the State of North
23 Carolina and South Carolina and other
24 jurisdictions as well. We have not evaluated

1 those landfills at the same level or depth at
2 this time. The Buncombe County landfill will be
3 our first solar on a landfill project that has
4 gotten this far through the due diligence
5 process. And again, it's -- a lot of that was
6 brought about by the fact that this is part of
7 the Western Carolina's Modernization Project and
8 it's very challenging to find sites to support
9 solar and so this represented an ideal location
10 within the context of the WCMP.

11 I will say, Commissioner, that
12 there is ongoing interest from municipalities on
13 evaluation and developing solar on municipal
14 landfills. Without naming the jurisdictions, I
15 have spoken directly with several within the
16 State of North Carolina that do have interests in
17 exploring this concept further.

18 Q Let me chip here a bit in terms of the RECs that
19 will be generated by the site, this particular
20 project, how many Renewable Energy Certificates
21 are we talking about? I mean, could you put a
22 number on it so that I can get a sense and feel
23 as to what this additional cost might be if
24 perhaps these were available to some entity other

1 than Buncombe County? I'm trying to get some
2 sense as to how many RECs are actually being
3 generated from this particular facility and this
4 proposal?

5 A (Mr. Watson) And I'm going to ask Mr. Beaver to
6 check me on this number, but I'd say,
7 Commissioner, approximately 9400 RECs will be
8 generated in year one from this facility.

9 A (Mr. Beaver) I would agree with that.

10 Q That sounds correct? And after year one would
11 there be any change or would that be consistent?

12 A (Mr. Beaver) There would be a slight decline year
13 over year, a decline with the projected
14 production degradation which we're estimating to
15 be about four-tenths of a percent a year. So it
16 would be a very slow decline over time.

17 Q Okay. Thank you. And I guess the follow-up
18 question without getting into any confidential
19 information is -- well, let me restructure this
20 question because I don't want to get into that
21 and that perhaps would do so.

22 Will there be another panel coming
23 back in to talk about cost in a way that we'll be
24 able to get some understanding as to what Public

1 Staff is looking at in terms of what they believe
2 to be the fair market value of the RECs or
3 additional incremental costs that ought to be
4 involved with this project? Is there another
5 panel that's going to deal with any of those
6 issues? It's an issue that the Public Staff has
7 raised, so I'm trying to wrestle with it and get
8 my arms around it to understand the actual
9 magnitude of what they are suggesting in terms of
10 additional costs as a result of what has been now
11 structured as the transaction would look like
12 with Buncombe County?

13 A (Mr. Watson) Commissioner, I think perhaps if we
14 were to go into detail on the financial
15 arrangement we would need to go to confidential
16 session. However, I can add some context on the
17 concept of the REC treatment. And I think what
18 Mr. Thomas was describing in terms of placing a
19 value on the RECs was assigning the incremental
20 cost above avoided cost as the REC value. That
21 is the case through REPS compliance. However, as
22 Mr. Thomas noted, we have not actually procured
23 RECs since I believe - I think I may be off by a
24 year or two, Commissioner - but since 2016 we

1 have not procured RECs for compliance purposes.

2 There is also another market
3 outside of the REPS compliance though and I'll
4 refer to that as the voluntary REC market in
5 North Carolina. And customers are able to go and
6 procure RECs at a market rate that is
7 significantly lower than the incremental cost
8 above avoided cost for this solar facility or
9 another solar facility similarly sized.

10 So Buncombe County is fully aware
11 of the REC market and they're very sophisticated
12 with their sustainability plans and their
13 understanding of the voluntary REC market. In
14 this case, their goal was to make their landfill
15 available to support the -- well, their landfill
16 available to support the development of solar.
17 And this project aligns well with their goal to
18 have solar at this location as well as support
19 the goals of the Western Carolinas Modernization
20 Project. They could simply go to the market and
21 they could buy RECs at a significantly lower
22 value than what Mr. Thomas was suggesting in
23 terms of valuing those RECs at the incremental
24 cost above avoided cost. I hope that answers

1 your question.

2 Q That does help me. That does provide some
3 context and so I appreciate that response.

4 COMMISSIONER McKISSICK: Madam Chair, I
5 don't have any further questions at this time.

6 CHAIR MITCHELL: I do have an additional
7 question for the panel.

8 EXAMINATION BY CHAIR MITCHELL:

9 Q The public Staff raises the issue that this is
10 a -- that this facility is proposed as solar-only
11 suggests that solar may provide additional
12 benefits to the system through, I heard
13 Mr. Thomas reference "frequency regulation". You
14 know, we're increasingly seeing CPCN applications
15 that would pair solar and storage, and recognize
16 that some of those solar plus storage facilities
17 have been approved in other context. So talk
18 some about the Company's decision to go with
19 solar only here and the extent to which it has
20 explored other benefits that could be provided to
21 the system if it were to pair with storage or
22 utilize this facility for some other purpose.

23 A (Mr. Watson) I can start that -- I can start on
24 that answer. Sorry. I moved my camera here a

1 little bit. I can start on that and then I'll
2 turn it over to Mr. Beaver to add some context.

3 At the time when we were looking
4 for this site we were working on parallel paths
5 with the Solar Development Team as well as the
6 Energy Storage Team. The Hot Springs project is
7 an example of where solar and storage, how those
8 types of projects align well, because there was a
9 unique need as you know at Hot Springs for
10 additional support as Mr. Thomas described in his
11 testimony. The Energy Storage Team has also been
12 looking at additional sites for energy storage.
13 And there is another facility, the rock -- I
14 believe the Rock Hill energy storage facility
15 that is part of the Western Carolina's
16 Modernization Project that is essentially down
17 the road from Woodfin, from this location.

18 At the time we developed this
19 project, due to the focus of the Energy Storage
20 Team as well as the use cases for batteries, the
21 decision was made not to pursue a solar and
22 storage facility at this location. It certainly
23 could have complicated interconnection at that
24 location as well. And so we determined in

1 evaluating this site, also with the limits of the
2 weight that we're allowed to put on the cap of
3 that landfill, that solar-only was the
4 appropriate use case for this location. But it
5 was discussed in general but we decided again
6 that because of this particular site and the
7 other locations of energy storage to support WCMP
8 that this site was better suited for a solar-only
9 effort.

10 Mr. Beaver, do you have anything
11 to add to that?

12 A (Mr. Beaver) I mean, a few things. And Larry
13 is -- Mr. Watson is much more familiar with the
14 development process that's been going on with
15 that team than maybe I have. I'll kind of
16 reflect back a little bit on Hot Springs in
17 particular since Mr. Thomas brought it up and it
18 has been brought up a little bit in both
19 testimony and some of the data requests.

20 You know, it was pointed out
21 earlier there was a deferral value associated
22 with Hot Springs that was certainly included with
23 that. I don't know that in this particular use
24 case there would be a deferral value. So

1 depending on what cost-effectiveness metric is
2 being evaluated, it would be speculative on my
3 part, but I'm not certain if for this particular
4 location without that deferral value if adding
5 battery would have helped the relative rate
6 impacts or not.

7 I think also just kind of pigging
8 back on what Mr. Watson said with the other
9 location, the Rock Hill location, probably it
10 satisfied our -- or close to satisfied our
11 5 megawatts within the Order, so those are
12 probably some of the other things. But like I
13 said, the details behind that I'm not as familiar
14 with.

15 Q Thank you for that response.

16 CHAIR MITCHELL: I have nothing further. I
17 will see if there are questions on Commissioners'
18 questions. Mr. Little.

19 MR. LITTLE: No questions, Your Honor.

20 CHAIR MITCHELL: Duke, any questions on
21 Commissioners' questions?

22 MR. JIRAK: Thank you, Chair Mitchell, just
23 a few minor questions here.

24 EXAMINATION BY MR. JIRAK:

1 Q Let me begin with a topic that Commissioner
2 McKissick was exploring. Mr. Watson, you were
3 asked a series of questions about the experience
4 that Duke would gain, the experience that Duke
5 would gain by previous project and constructing
6 and operating on a landfill, a closed municipal
7 landfill; do you recall those questions?

8 A (Mr. Watson) yes.

9 Q And, Mr. Watson, assuming that the State
10 continues to pursue a policy of broader
11 deployment of solar resources, do you believe it
12 would be beneficial for the Company to have a
13 greater understanding of not just the
14 construction challenges but also the operation
15 and maintenance challenges and unique
16 opportunities of development of solar on closed
17 municipal landfills?

18 A Yes, I do.

19 Q Thank you, Mr. Watson. And you were also asked a
20 series of questions from Chair Mitchell regarding
21 the ways in which the Company has engaged
22 Buncombe County on the project structure and
23 subsequent to the filing of Public Staff
24 testimony; do you recall those questions?

1 A Yes.

2 Q And of the options discussed with Buncombe County
3 for any adjustments to the current arrangement,
4 what have they indicated to you is their strong
5 preference with respect to this project?

6 A They indicated a strong preference for option
7 one, which is basically netting out the value of
8 the -- or assigning a value to the RECs to equal
9 of the lease agreement, so the land lease
10 agreement would be a no cost site lease
11 agreement. They expressed that both through
12 staff discussions and, as I understand it, a
13 subsequent letter by Chair Newman to this
14 proceeding.

15 Q And so under that arrangement, what you referred
16 to as option one, the lease payment would go to
17 zero but Buncombe County would retain the RECs,
18 correct?

19 A Yes. They would be buying the RECs in that
20 arrangement.

21 Q And would you agree that the fact that Buncombe
22 County would be retaining these RECs essentially
23 means that a community solar tie-in is not
24 possible with this project?

1 A That's correct. That's my understanding.

2 Q And, therefore, there's no -- again, just to
3 affirm your testimony, there's no need to defer a
4 decision on this proceeding in any form or
5 fashion because the answer that we got from
6 Buncombe County is fairly clear?

7 A Yes, that is correct.

8 Q And would you agree that now that Duke has
9 essentially the offer of a zero dollar land cost
10 lease, so the land cost has gone to zero, and the
11 fact that the largest cost of this project, the
12 capital costs were competitively bid and have
13 been delivered at a price that's in line with
14 market price, would you agree that that makes
15 this project cost-effective within the parameters
16 of the WCMP Order?

17 A Yes, I would.

18 Q Thank you, Mr. Watson.

19 MR. JIRAK: Chair Mitchell, I have no
20 further questions.

21 CHAIR MITCHELL: With that, I believe we
22 have come to the end of the examination of this panel.
23 Gentlemen, you may step down. And, Mr. Jirak, you may
24 call your next witness.

1 (The witnesses are excused)

2 MR. JIRAK: Thank you, Chair Mitchell. At
3 this time DEP would like to call to testify Mr. Jason
4 Walls.

5 JASON WALLS;
6 having been duly affirmed,
7 testified as follows:

8 CHAIR MITCHELL: Mr. Walls, you are on mute
9 so please unmute, please. Thank you. Mr. Jirak, you
10 may proceed.

11 MR. JIRAK: Thank you, Chair Mitchell.

12 DIRECT EXAMINATION BY MR. JIRAK:

13 Q Mr. Walls, please -- again, just for the record,
14 please state your full name and title?

15 A Jason Walls and I'm the Manager of Local
16 Government and Community Relations in the
17 Asheville area.

18 MR. JIRAK: And I apologize, Chair Mitchell,
19 I got a little carried away. Mr. Somers was going to
20 handle this witness and I totally steam rolled him. I
21 apologize, Mr. Somers, and I'll turn it over to you.

22 MR. SOMERS: Thank you. It's not the first
23 time I've been steam rolled in a Commission hearing
24 before, so thank you.

1 MR. JIRAK: If we were in person, Mr. Somers
2 could have easily kicked me under the table but
3 virtually he's not able to do that.

4 MR. SOMERS: No problem. I apologize.
5 Chair Mitchell, let me pick up where Mr. Jirak was.

6 DIRECT EXAMINATION BY MR. SOMERS:

7 Q Mr. Walls, I believe -- did you state your name
8 for the record?

9 A Yes, sir. My name is Jason Walls and I am the
10 Local Government and Community Relations Manager
11 for the Asheville area for Duke Energy.

12 Q All right. How is the weather in Buncombe County
13 today?

14 A It is nice and cool. When we started the hearing
15 we were still in the 20's. I think we have
16 warmed up to the upper '40's this morning, so
17 it's nice and brisk.

18 Q All right. And what is your business address if
19 you haven't given us that yet?

20 A My business address is 555A Brevard Road,
21 Asheville, North Carolina 28806.

22 Q Mr. Walls, you caused to be prefiled rebuttal
23 testimony in this case on November the 6th of
24 approximately nine pages; is that correct?

1 A That is correct.

2 Q And do you have any changes or corrections to
3 your testimony?

4 A I do not.

5 Q So if I were to ask you the same questions as
6 contained in your prefiled testimony today, would
7 your answers be the same?

8 A Yes, sir.

9 MR. SOMERS: Chair Mitchell, I would ask
10 that Mr. Walls' prefiled rebuttal testimony be entered
11 into the record as if given orally from the stand.

12 CHAIR MITCHELL: Hearing no objection to
13 your motion, it will be allowed.

14 (WHEREUPON, the prefiled rebuttal
15 testimony of JASON WALLS is copied
16 into the record as if given orally
17 from the stand.)

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1257

In the Matter of)
Application of Duke Energy Progress, LLC for)
A Certificate of Public Convenience and)
Necessity to Construct a Solar Generating)
Facility in Buncombe County, North Carolina)
)
)

**REBUTTAL TESTIMONY
OF
JASON WALLS**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Jason Walls, and my business address is 555-A Brevard Road,
3 Asheville, North Carolina, 28806.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Progress, LLC (“DEP or the Company”) as a Local
6 Government and Community Relations Manager for the DEP-West region
7 (Asheville Area). I am responsible for DEP’s external relations in Avery,
8 Buncombe, Haywood, Madison, Mitchell and Yancey counties. In this role I work
9 closely and collaboratively with local government staff and elected leaders;
10 community and business leaders; local non-profits; and local advocacy
11 organizations on all efforts involving the Company.

12 **Q. WHAT IS YOUR EDUCATION AND PROFESSIONAL EXPERIENCE?**

13 A. I received a B.A. in Political Science and a B.A. in Environmental Studies from
14 Emory & Henry College and a M.A. in Organizational Communications from
15 Queens University. I started my career with Duke Energy in 2002 in the Hydro
16 Relicensing group, as an associate scientist. Over time, I held different roles of
17 increasing responsibility primarily in Duke Energy’s corporate communications
18 department. During this time, I focused on media relations and external
19 communications associated with rates and regulatory efforts in North Carolina,
20 South Carolina, and Ohio and with hydroelectric, fossil and nuclear operations and
21 commercial renewables. I transitioned into the Government and Community
22 Relations Manager role in Asheville in February 2013.

23 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?**

1 A. No.

2 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

3 A. The purpose of my testimony is to respond to the Public Staff's opposition to the
4 Woodfin Solar Project by describing the Company's community engagement
5 efforts across the region, but specifically in connection with the Western Carolinas
6 Modernization Program ("WCMP"). I will also provide the Commission with an
7 overview of the diverse and substantial community support for the WCMP
8 generally and the Woodfin Solar Project, specifically.

9 **Q. PLEASE GENERALLY DESCRIBE YOUR ENGAGEMENT WITH THE**
10 **WCMP.**

11 A. As Duke Energy's government and community relations manager in the Asheville
12 region, I am responsible for engaging with local leaders, customers, community
13 and business groups, and advocacy organizations on all issues involving Duke
14 Energy, including the WCMP. I have been involved with the WCMP community
15 stakeholder engagement since its inception.

16

17 In 2016 I, along with a group of local leaders representing the City of Asheville,
18 Buncombe County, and others from Duke Energy, attended the Rocky Mountain
19 Institute's ("RMI") eLab Accelerator to outline a community engagement effort to
20 increase demand-side management, energy efficiency and distributed energy
21 resources locally. From this grew the Energy Innovation Task Force ("EITF"). The
22 EITF was formed in 2016 and was comprised of a diverse group of community
23 leaders to (1) avoid or delay the construction of the planned contingent CT; and (2)

1 Transition DEP-West to a smarter, cleaner and affordable energy future. I served
2 as one of three co-conveners of the EITF, its working groups, and the Blue Horizons
3 Project. The three co-conveners led the meetings, facilitated discussion and helped
4 enable successful EITF outcomes.

5
6 The EITF has since been dissolved but recast as the Blue Horizons Project
7 Community Council (“Blue Horizons Project”). The purpose of this council is to
8 drive behavior and investments that help achieve the community’s renewable
9 energy goal. I will continue to serve as the Duke Energy lead on this community
10 council.

11 **Q. WHAT ARE SOME EXAMPLES OF THE WAYS IN WHICH THE**
12 **COMPANY HAS PRIORITIZED COMMUNITY ENGAGEMENT IN**
13 **CONNECTION WITH THE WCMP?**

14 A. Community engagement is the foundation of the Company’s overall strategy in the
15 Asheville Area. From the announcement of the initial WCMP and the Foothills
16 Transmission Line in August of 2015, to updating that plan to reflect the feedback
17 we received from the community, we recognize our plans should be reflective of
18 the Company and communities’ common interests. The evolution from the initial
19 August 2015 plan to the revised plan filed with this Commission in DEP’s CPCN
20 notice filing in December 2015 reflects how the Company listened and responded
21 to the community. Those principles of listen, respond and reflect guide all our work
22 today.

23

1 As work with the EITF launched, we knew a trusted analysis of the problem to
2 solve was needed. The EITF collectively partnered with RMI to study the peak
3 demand problem in the Asheville Area. This analysis revealed residential heating
4 load as the top contributor to peak load growth in the region. The analysis also
5 revealed that Buncombe County and the DEP-West service area in general have a
6 greater percentage of low-income households than North Carolina overall. Over
7 40% of DEP-West households are low income. Four geographic areas in particular
8 were identified as having a higher fraction of low-income households than the rest
9 of the region. Almost 20% of Buncombe County housing are manufactured homes
10 which tend to be significantly less efficient than traditional houses. Based on the
11 analysis, we determined that efforts should focus on the expansion of targeted
12 energy efficiency and shifting when customers use electricity. Specifically, it
13 advised the convening partners to focus on increasing participation in energy
14 efficiency programs, improving penetration of demand-side management
15 programs, and expanding the application of renewables and other advanced
16 solutions. We conducted a joint workshop with Duke Energy program managers
17 and EITF members to identify opportunities to improve existing EE and DSM
18 program offerings, generate ideas for new programs, and determine how all
19 stakeholder organizations can work together more effectively.

20
21 The Blue Horizons Project community engagement campaign launched in early
22 2018 as the outward facing engagement effort to connect customers with both
23 company and non-company programs to reduce peak demand growth in the region.

1 A project manager was hired by the Green Built Alliance, a local non-profit focused
2 on the promotion of green building, to coordinate and conduct campaign activities.
3 The position is being co-funded by the City of Asheville and Buncombe County.
4 Duke Energy supported the campaign through the involvement of the Shelton
5 Group and integration of Blue Horizons branding with Duke Energy
6 communication and marketing materials as appropriate. A web site
7 (<https://bluehorizonsproject.com/>) has been developed that provides useful
8 information and links for customers and other interested people to learn how they
9 can support the goals and objectives of the EITF partnership.

10
11 Since 2016, I have personally conducted a minimum of 35 formal community
12 conversations about the Blue Horizons Project. Community meetings have been
13 held throughout Asheville and Buncombe County, including in racially and
14 economically diverse neighborhoods. Additionally, we held small-to-medium
15 business seminars on programs and offerings to reduce energy use. We endeavor
16 to be inclusive, including a conscious effort to be racially and economically
17 inclusive, in our partnerships and planning work, and to focus on lowering energy
18 costs.

19
20 This deliberate and purposeful community engagement has grown from our initial
21 commitments in the WCMP docket and has served to reinforce the role community
22 engagement plays in sustainable and productive outcomes for customers in all
23 aspects of our work locally. This work spans substation siting/rebuilds, distribution

1 feeder rebuilds, onsite coal ash landfill permitting, battery storage siting and new
2 solar investment.

3 **Q. PLEASE PROVIDE DETAILS CONCERNING COMMUNITY SUPPORT**
4 **FOR THE COMPANY'S OVERALL IMPLEMENTATION OF WCMP.**

5 A. The support from our local community partners has been remarkable and its success
6 visible through accomplishments. As originally referenced in the company's 2018
7 and 2019 Integrated Resource Plans, in part through this community collaboration
8 in Buncombe County, the contingent CT that was part of the original WCMP CPCN
9 application has been pushed out beyond the 15-year planning horizon. The EITF
10 and Blue Horizons Project played a critical role in helping substantially increase
11 customer participation in the Company's DSM program, EnergyWise Home.

12
13 In late 2018, both the City of Asheville and Buncombe County issued 100 percent
14 clean/renewable energy goals. The goals require that both the City and County
15 achieve the 100 percent targets for operations by 2030, and for all homes and
16 businesses by 2042.

17
18 The original conveners all agree that a continued commitment and partnership
19 among the City, County, and Duke Energy is critical to enable success of these very
20 ambitious local goals. The Woodfin Solar Project is the foundational project
21 Buncombe County is relying on for its ability to achieve their 100 percent
22 renewable energy goal.

1 **Q. PLEASE DESCRIBE YOUR ENGAGEMENT SPECIFICALLY WITH THE**
2 **WOODFIN SOLAR PROJECT.**

3 A. As part of my work with the EITF, the Woodfin Solar Project became a rallying
4 point and a tangible sign of significant progress toward local renewable energy
5 goals. Beyond my role with the EITF, I was the Company's lead local
6 presenter/witness before the Buncombe County Commission and the Town of
7 Woodfin Board of Alderman. The county commissioners had to approve the
8 concept of solar on the retired landfill and the contract terms for the Company to
9 own and operate the facility. The Town of Woodfin had to approve the conditional
10 use of the project. I worked closely with our community stakeholders, local
11 government leaders, and the Duke Energy renewables project management team in
12 all phases of the Woodfin Solar Project.

13 **Q. PLEASE PROVIDE DETAILS CONCERNING THE COMMUNITY**
14 **SUPPORT FOR THE WOODFIN SOLAR PROJECT.**

15 A. There has been and continues to be overwhelming support for the Woodfin Solar
16 Project from the environmental advocacy community, local elected leaders and the
17 community at large. The Commission has seen some of this from the many
18 supportive statements filed in this docket. In my formal and informal conversations
19 with local leaders, even those who do not put clean energy as their top issue, solar
20 energy on top of a retired landfill simply makes sense. There are not many uses for
21 the county's retired landfill, but a solar facility allows the entire community to
22 benefit from clean energy.

23

1 The Woodfin Solar Project has been cited locally as a “win-win” success story. The
2 Asheville Area has a passionate and informed citizenry who have long advocated
3 for renewable energy and a commitment from Duke Energy for a smarter, cleaner
4 energy future. I’m proud that we have been able to collaboratively deliver on that
5 promise with the Woodfin Solar Project.

6 **Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**

7 A. Yes, it does.

1 MR. SOMERS: Thank you.

2 BY MR. SOMERS:

3 Q Mr. Walls, have you also prepared a summary of
4 your rebuttal testimony?

5 A Yes, sir.

6 Q Would you please give that to the Commission at
7 this time?

8 A Good afternoon, Chair Mitchell and Commissioners.
9 My testimony provides greater context for the
10 WCMP and the Woodfin Solar Project specifically.
11 As Duke Energy's Government and Community
12 Relations Manager in the Asheville region, I am
13 responsible for engaging with local leaders,
14 customers, community and business groups, and
15 advocacy organizations on all issues involving
16 Duke Energy, including the WCMP. I have been
17 involved with the WCMP community stakeholder
18 engagement work since its inception.

19 Since August of 2015 and
20 throughout the WCMP, the Company has had a
21 deliberate, meaningful and purposeful approach to
22 community engagement and, through this engagement
23 has been able to set in motion a comprehensive
24 approach to ensure the continued reliability of

1 service while seeking to align with the
2 community's goals and desires. I can personally
3 attest to the strong community interest in the
4 successful development of the solar projects
5 contemplated by the WCMP and the bedrock
6 expectation that such solar projects were an
7 integral part of the overall plan. I can also
8 speak from first-hand experience in the community
9 that the Woodfin Solar Project became a rallying
10 point and a tangible sign of significant progress
11 toward local renewable energy goals.

12 There has been and continues to be
13 overwhelming support for the Woodfin Solar
14 Project from the environmental advocacy
15 community, local elected leaders and the
16 community at large. The Commission has seen some
17 of this from the many supportive statements filed
18 in this docket. In my formal and informal
19 conversations with local leaders, even those who
20 would not put clean energy as their top issue,
21 solar energy on top of a retired landfill simply
22 makes sense. There are not many uses for the
23 County's retired landfill, but a solar facility
24 allows the entire community to benefit from clean

1 energy. The Woodfin Solar Project has been cited
2 locally as a win-win success story. The
3 Asheville area has a passionate and informed
4 citizenry who have long advocated for renewable
5 energy and a commitment from Duke Energy for a
6 smarter, cleaner energy future. I am proud that
7 we have been able to collaboratively deliver on
8 that promise with the Woodfin Solar Project.
9 Thank you.

10 Q Thank you, Mr. Walls. I noted that earlier in
11 looking at the participants in this hearing there
12 were several folks from western North Carolina
13 including a representative of the Buncombe County
14 Commissioners who were viewing this as
15 participants, and so I wanted to thank you for
16 collaborating with them and testifying today as
17 to that partnership.

18 MR. SOMERS: With that, Chair Mitchell,
19 Mr. Walls is available for cross examination.

20 CHAIR MITCHELL: Mr. Little, you may
21 proceed.

22 MR. LITTLE: The Public Staff has no
23 questions for Mr. Walls.

24 CHAIR MITCHELL: Okay. We will take

1 questions from Commissioners. Commissioner
2 Brown-Bland.

3 COMMISSIONER BROWN-BLAND: I have no
4 questions. Thank you.

5 CHAIR MITCHELL: Commissioner Gray.

6 COMMISSIONER GRAY: No questions.

7 CHAIR MITCHELL: Commissioner Clodfelter.

8 COMMISSIONER CLODFELTER: No questions.

9 CHAIR MITCHELL: Commissioner Duffley.

10 COMMISSIONER DUFFLEY: No questions.

11 CHAIR MITCHELL: Commissioner Hughes.

12 COMMISSIONER HUGHES: (Inaudible)

13 CHAIR MITCHELL: Okay. No questions from
14 Commissioner Hughes. Commissioner McKissick.

15 COMMISSIONER MCKISSICK: No questions.

16 CHAIR MITCHELL: Mr. Walls, you got off
17 easily today. You may step down and be excused, sir.

18 (The witness is excused)

19 CHAIR MITCHELL: At this point it looks like
20 we have come to the end of our hearing, and we will
21 entertain post-hearing filings. Thirty days from the
22 date of notice, from the notice of the mailing of the
23 transcript. Obviously, you all may submit them as
24 soon as you would like to. Any additional matters for

1 my consideration before we adjourn?

2 MR. JIRAK: Thank you, Chair Mitchell. None
3 from DEP.

4 CHAIR MITCHELL: Okay.

5 MR. LITTLE: None from the Public Staff,
6 Your Honor.

7 CHAIR MITCHELL: Well, thank you everybody
8 for your participation today and for being well
9 prepared for today's hearing. With that, we will be
10 adjourned.

11 (The proceedings were adjourned)

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C E R T I F I C A T E

I, KIM T. MITCHELL, DO HEREBY CERTIFY that
the Proceedings in the above-captioned matter were
taken before me, that I did report in stenographic
shorthand the Proceedings set forth herein, and the
foregoing pages are a true and correct transcription
to the best of my ability.

Kim T. Mitchell

Kim T. Mitchell
Court Reporter