



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

October 20, 2020

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

Re: Docket No. E-2, Sub 1257 – Application for CPCN for 5MW Solar Facility Located at 2720 Riverside Drive, Woodfin, NC 28804, Buncombe Co

Dear Ms. Campbell:

In connection with the above-referenced docket, I transmit herewith for filing on behalf of the Public Staff the confidential testimony of Jeff Thomas, Utilities Engineer, Electric Section, Energy Division.

By copy of this letter, I am forwarding a copy of the redacted version to all parties of record by electronic delivery. The confidential version will be provided to those parties that have entered into a confidentiality agreement.

Sincerely,

Electronically submitted  
/s/ John D. Little  
Staff Attorney  
[john.little@psncuc.nc.gov](mailto:john.little@psncuc.nc.gov)

Attachment

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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,	)	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)<sup>1</sup> 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

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

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<sup>5</sup> 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?**

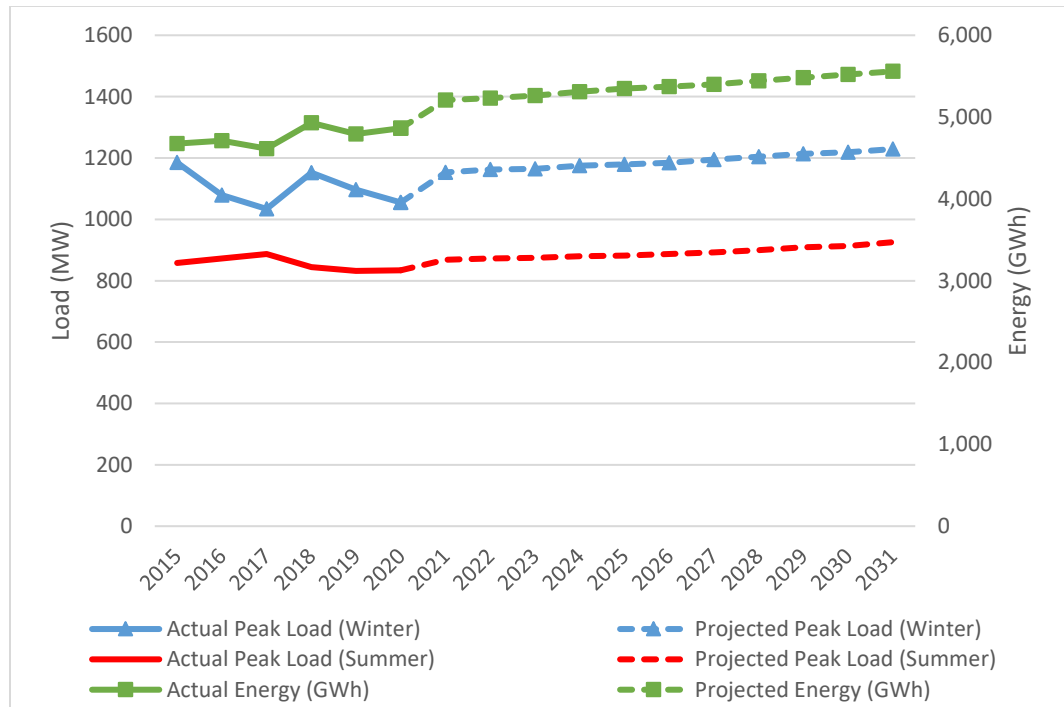
20 A. No. The Public Staff began its investigation by asking DEP this very  
21 question. DEP responded, stating that:

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 Carolinas 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.<sup>6</sup>

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<sup>6</sup> 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.

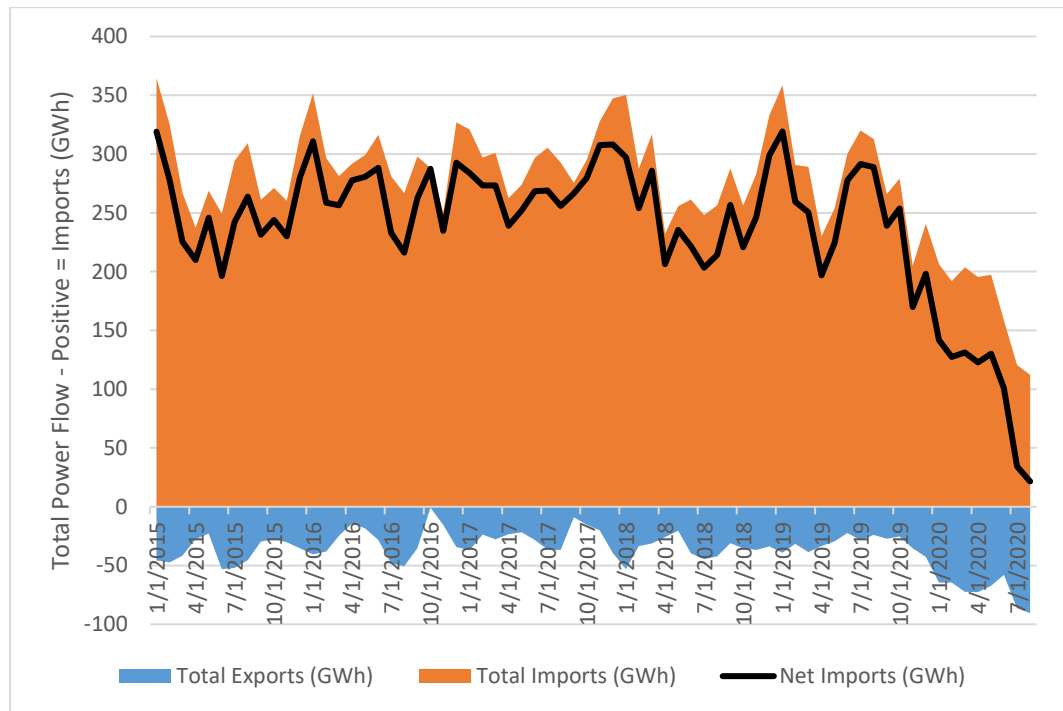
3 *Table 1: Comparison of DEP-W and DEP System Projections. Includes impact of EE.*

	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.<sup>7</sup>



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

<sup>7</sup> 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.<sup>8</sup> 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.<sup>9</sup>

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

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

<sup>9</sup> 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.”<sup>10</sup>

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

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<sup>10</sup> 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]**  **[END**  
9 **CONFIDENTIAL]** therefore, approximately **[BEGIN**  
10 **CONFIDENTIAL]**  **[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]**  **[END CONFIDENTIAL]** of the Facility costs  
14 in base rates, the Public Staff's concerns would be resolved.<sup>11</sup>

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.<sup>12</sup> **[BEGIN CONFIDENTIAL]**   
18 

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<sup>11</sup> 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.

<sup>12</sup> 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.<sup>14</sup> [BEGIN CONFIDENTIAL] [REDACTED]  
20 [REDACTED]

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<sup>13</sup> [BEGIN CONFIDENTIAL] [REDACTED]  
[REDACTED]  
[REDACTED] . [END CONFIDENTIAL]

<sup>14</sup> 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.<sup>15</sup>  
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

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<sup>15</sup> 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.<sup>16</sup>

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).<sup>17</sup>

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<sup>16</sup> 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.

<sup>17</sup> *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.<sup>19</sup> 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

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<sup>18</sup> N.C. Gen. Stat. § 62-126.8(e)(8).  
<sup>19</sup> 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.

## **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.