# STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-34, SUB 54 DOCKET NO. E-34, SUB 55

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-34, SUB 54	)
In the Matter of Application of Appalachian State University, d/b/a New River Light and Power Company for Adjustment of General Base Rates and Charges	) ) ) ) )
Applicable to Electric Service	) JOINT PROPOSED ORDER ) OF NEW RIVER LIGHT
DOCKET NO. E-34, SUB 55	) AND POWER AND ) THE PUBLIC STAFF
In the Matter of	)
Petition of Appalachian State	)
University d/b/a New River Light and	)
Power Company for an Accounting	)
Order to Defer Certain Capital Costs	)
and New Tax Expenses	

HEARD: Tuesday, May 23, 2023, at 7:00 p.m., in Courtroom 1, Watauga

County Courthouse, 842 West King Street, Boone, North

Carolina, 28607;

Monday, July 10, 2023, at 2:00 p.m., in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh,

North Carolina

BEFORE: Commissioner Karen M. Kemerait, Presiding; Chair Charlotte A.

Mitchell; and Commissioners ToNola D. Brown-Bland, Daniel G. Clodfelter, Kimberly W. Duffley, Jeffrey A. Hughes, and Floyd B.

McKissick, Jr.

#### APPEARANCES:

For New River Light & Power:

M. Gray Styers, Jr., Fox Rothschild LLP, 230 N. Elm Street, Suite 1200, Greensboro, NC 27401

David T. Drooz, Fox Rothschild LLP, 434 Fayetteville Street, Suite 2800, Raleigh, North Carolina 27601

## For the Using and Consuming Public:

William E. H. Creech, Thomas J. Felling, and William S. F. Freeman, Staff Attorneys, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4300

### For Appalachian Voices:

Nicholas Jimenez and Munashe Magarira, Southern Environmental Law Center, 601 West Rosemary Street, Suite 220, Chapel Hill, NC 27516

### For Nancy LaPlaca:

Nancy LaPlaca, pro se, LaPlaca and Associates, LLC, 239 Wildwood Lane, Boone, North Carolina 28607

BY THE COMMISSION: On June 29, 2022, pursuant to Commission Rule R1-17(a), Appalachian State University, d/b/a New River Light & Power (NRLP), filed notice of its intent to file a general rate application.

On November 8, 2022, NRLP filed a Petition of Appalachian State University d/b/a/ New River Light & Power Company for an Accounting Order to Defer Certain Costs and New Tax Expenses (Petition for Accounting Order) in Docket No. E-34, Sub 55, pursuant to Commission Rules R1-5 and R8-27.

On December 22, 2022, NRLP filed an application with the Commission pursuant to N.C. Gen. Stat. §§ 62-133 and 62-134, and Commission Rules R1-5, R1-17, and R8-27, seeking authority to increase its rates for electric service in its service area in Watauga County, North Carolina (Application). The Application was

accompanied by the testimony and exhibits of Edmond C. Miller, General Manager of NRLP; Randall E. Halley, Managing Principal with Summit Utility Advisors, Inc. (Summit); Exhibits A, B, C, D, and E; Appendix 1, and the Form E-1 information required by Commission Rule R1-17(b)(12).

On January 11, 2023, the Commission issued its Order Establishing General Rate Case and Suspending Rates.

On January 18, 2023, NRLP filed a Motion to Consolidate Dockets, wherein it requested consolidation of the rate case proceeding in Docket No. E-34, Sub 54, with the Petition for Accounting Order in Docket No. E-34, Sub 55.

On January 18, 2023, Appalachian Voices filed a petition to intervene in Docket No. E-34, Sub 54.

On January 19, 2023, Appalachian Voices filed a petition to intervene in Docket No. E-34, Sub 55.

On February 1, 2023, the Commission issued its Order Granting Motion to Consolidate Dockets (Consolidation Order).

On February 1, 2023, the Commission issued its Order Granting Petitions to Intervene of Appalachian Voices.

On March 20, 2023, the Commission issued its Order Scheduling Hearings, Establishing Procedural and Filing Requirements, and Requiring Customer Notice (Scheduling Order).

On March 28, 2023, the Commission issued its Order Requiring Corrected Customer Notice and Requiring Amended Application Schedules to be Filed.

On March 28, 2023, NRLP filed its Amended Exhibits B and C to its Application.

On April 10, 2023, NRLP filed an update to its capital costs and revenue requirement as reflected in amended Exhibit REH-3 and amended Exhibit REH-13 from Mr. Halley on behalf of NRLP.

On April 24, 2023, NRLP filed an Affidavit of Publication prepared by a representative of The Watauga Democrat (Boone, North Carolina), stating that NRLP had caused publication of the notice of its Application on April 12 and 19, 2023, as required by the Commission's March 28, 2023 Order.

On April 25, 2023, Appalachian Voices moved to adjust the scheduled expert hearing; on May 2, 2023, the Commission issued an Order Denying Motion to Adjust Schedule of Expert Witness Hearing.

On May 2, 2023, NRLP filed amended and supplemental rate schedules.

On May 2, 2023, NRLP filed a verified certificate of service showing that it had provided customer notice as required by the Scheduling Order.

On May 23, 2023, at 7:00 p.m., at the Watauga County Courthouse in Boone, North Carolina, this matter came on for hearing for the purpose of receiving testimony from public witnesses. Richard Gray, David Jackson, Chris Thaxton,

Perry Yates, Douglas James, Jeff Deal, Nancy LaPlaca, Steve Owen, and Amber Mellon testified as public witnesses.

On May 30, 2023, Nancy LaPlaca filed a petition to intervene in Docket No. E-34, Sub 54.

On June 1, 2023, the Commission issued an Order Granting Petition to Intervene of Nancy LaPlaca.

On June 6, 2023, the Public Staff filed the testimony and exhibits of John R. Hinton, Director, Economic Research Division; Joint Testimony of Sonja Johnson, Financial Manager for Natural Gas and Transportation, Accounting Division, and Iris Morgan, Staff Accountant, Accounting Division; and Jack Floyd, Utilities Engineer, Electric Division.

On June 6, 2023, Nancy LaPlaca filed the Direct Testimony of Nancy LaPlaca.

On June 6, 2023, Appalachian Voices filed the testimony and exhibits of Justin Barnes, President, EQ Research LLC, and Jason Hoyle, Principal Energy Policy Analyst, EQ Research LLC.

On June 23, 2023, NRLP filed the rebuttal testimony and exhibits of Edmond Miller, David Stark, David Jamison, and Randall E. Halley.

On June 30, 2023, the Public Staff filed a Motion for Substitution of Witness and Adoption of Testimony, and Testimony of James S. McLawhorn, Director of the Energy Division.

On June 30, 2023, NRLP filed a Motion to File Witness List at Later Dates.

On July 3, 2023, the Commission issued an Order Granting NRLP's Motion to File Witness List at Later Dates.

On July 5, 2023, NRLP filed a Witness List for the July 10, 2023, Expert Witness Hearing.

On July 6, 2023, the Commission issue an Order Accepting Substitution of Witness and Allowing Adoption of Testimony, granting the Public Staff's motion to allow James S. McLawhorn to adopt Jack Floyd's prefiled direct testimony and exhibit.

On July 6, 2023, NRLP filed an Agreement and Stipulation of Settlement (Stipulation) that it had entered with the Public Staff (together, the Stipulating Parties). The Stipulation states that it resolves all areas of disagreement between the Stipulating Parties.

On July 6, 2023, the Public Staff filed the settlement testimony and exhibit of witness Hinton, the settlement testimony of witness McLawhorn, and the settlement testimony and exhibit of witness Fenge Zhang., Public Utilities Regulatory Manager of the Accounting Division.

On July 6, 2023, NRLP filed the settlement testimony and exhibits of witness Halley.

On July 6, 2023, NRLP filed a Motion to Excuse Appearance of Rebuttal Witness David Stark and to Accept Pre-filed Rebuttal Testimony into Record.

On July 6, 2023, the Public Staff filed a motion to allow Fenge Zhang to substitute for and adopt the testimony of witnesses Morgan and Johnson.

On July 6, 2023, Appalachian Voices filed a Summary of Testimony of Jason Hoyle and Justin Barnes.

On July 7, 2023, Nancy LaPlaca filed her Summary of Testimony.

Only July 7, 2023, NRLP filed a Summary of Rebuttal and Settlement Testimony of Randall Halley, Summary of Direct Testimony of Randall Halley, Summary of Direct Testimony of Edmond Miller, and Summary of Rebuttal Testimony of Edmond Miller.

On July 7, 2023, the Commission issued an Order Granting Motion to Excuse the Appearance of David Stark and to Accept Pre-Filed Rebuttal Testimony into the Record, in response to NRLP's motion, and also an Order Accepting Substitution of Witness and Allowing Adoption of Testimony, in response to the Public Staff's motion pertaining to witness Zhang.

On July 10, 2023, NRLP filed a Summary of Rebuttal Testimony of David Jamison.

The matter came on for hearing as scheduled on Monday, July 10, 2023, at 2:00 p.m., in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina.

On July 14, 2023, NRLP submitted the BREMCO Boundary Agreement and Boundary Map as a late-filed exhibit in response to a Commission request.

Based upon the verified Application, the testimony and exhibits received into evidence in this proceeding, the Stipulation, and the entire record in this proceeding, the Commission makes the following:

#### FINDINGS OF FACT

- 1. NRLP is organized as an operating unit of Appalachian State University (ASU or University), serving the retail electric power needs of ASU and retail customers in the Town of Boone and its surrounding areas. Although not a public utility, NRLP is properly subject to the jurisdiction of the Commission pursuant to N.C.G.S. § 116-35 with respect to the justness and reasonableness of its rates charged and services rendered to its retail electric customers.
- 2. NRLP has no generating facilities of its own and purchases almost all of its power supply requirements from Carolina Power Partners (CPP). The power that is purchased wholesale from CPP is delivered across transmission lines of Duke Energy Carolinas, LLC (DEC), and the distribution lines of Blue Ridge

<sup>&</sup>lt;sup>1</sup> There are also a few rooftop solar customers of NRLP who provide a small amount of electricity to the NRLP system.

Electric Membership Corporation (BREMCO), to the distribution system of NRLP. Prior to the January 1, 2022 effective date of its contract with CPP, NRLP purchased its wholesale power supply from BREMCO, which purchased its power supply from DEC.

- 3. NRLP is lawfully before the Commission based upon its Application for a general increase in its retail rates pursuant to N.C.G.S. § 116-35 and consistent with the requirements of N.C.G.S. §§ 62-133 and 62-134 and Commission Rule R1-17.
- 4. The appropriate test period for use in this proceeding is the 12-month period ended December 31, 2021, adjusted for certain known changes in expenses and rate base subsequent to the test period.
- 5. NRLP had a total of 8,882 metered customers, a peak load of 43.9 MW in 2021, and rate revenues (unadjusted) of \$16,287,187 as of December 31, 2021. Approximately 21.8% of NRLP's load in 2021 was for ASU, with the balance being for residential and commercial customers. NRLP has no industrial customers.
- 6. NRLP's present base rates have been in effect since 2018, with subsequent annual purchased power adjustments, a prepaid service rider in effect since 2020, and a renewable energy rider in effect since 2021.
  - 7. The quality of electric service NRLP is providing to its customers is good.

- 8. The Stipulation between NRLP and the Public Staff filed on July 6, 2023, is the product of give-and-take negotiations between the Stipulating Parties, material evidence in this proceeding, and entitled to appropriate weight along with the other evidence of record in this proceeding.
- 9. The provisions of the Stipulation are just and reasonable to all parties to this proceeding, as well as to NRLP's customers, and serve the public interest.
  - 10. It is appropriate to approve the Stipulation in its entirety.
- 11. The appropriate level of electric sales revenue increase as stipulated in this proceeding is \$4,288,000 in annual revenues from base rates. The net increase is \$2,207,074 after offsetting the base rate increase with the PPA decrease.
- 12. Per the Stipulation, the appropriate level of original cost of rate base is \$31,441,744,
- 13. Per the Stipulation, the appropriate level of net operating income for a return is \$1,938,379.
- 14. The Stipulation's resolution of the Unrelated Business Income Tax(UBIT) deferral is reasonable and appropriate for this proceeding.
- 15. The Stipulation's resolution of the Campus Substation deferrals is reasonable and appropriate for this proceeding.

- 16. The Stipulation's resolution of the inflation adjustment is reasonable and appropriate for this proceeding.
- 17. The Stipulation's resolution of the customer growth and usage adjustments is reasonable and appropriate for this proceeding.
- 18 The Stipulation's resolution of the rate case expense adjustment is reasonable and appropriate for this proceeding.
- 19. The proposed NBR rate with standby charges of \$5.92/kW/month for residential customers, \$6.39 for Rate Schedule G customers, and \$3.59 for Rate Schedule GL customers is reasonable and appropriate for this proceeding.
- 20. It is reasonable and appropriate for NRLP to reset NBR customer energy credits to zero on January 1 of each year.
- 21. The proposed Purchased Power for Renewable Energy Facilities Rate Schedule (PPR) is reasonable and appropriate for this proceeding.
- 22. The continuation of NRLP's approved Small Power Supplier (SP) rates is reasonable and appropriate for this proceeding.
- 23. The proposed Basic Facilities Charge of \$14.50/month for residential service is reasonable and appropriate for this proceeding.

- 24. It is reasonable and appropriate for NRLP to file an annual report on NBR credits, consumption patterns, revenues, and costs in conjunction with each PPA proceeding.
- 25. It is reasonable and appropriate for the NBR rate schedule to provide that renewable energy credits (certificates) shall be retained by the customers.
- 26. It is reasonable and appropriate for the NBR rate design and resetting process to be reviewed in five years or the next NRLP rate case, whichever is earlier.
- 27. It is reasonable and appropriate for the PPR energy credit to be based on total system avoided costs, with this calculation to be provided in the NRLP compliance filing made pursuant to this Order, and to be updated with each subsequent PPAC filing.
- 28. It is reasonable and appropriate for the PPR rate schedule to provide that renewable energy credits (certificates) shall be retained by the customers.
- 29. It is reasonable and appropriate for the PPR rate design to be reviewed during each biennial avoided cost proceeding beginning in 2025.
- 30. It is reasonable and appropriate for Interruptible Rate Rider (IR) credits to be paid only to participating customers who actually curtail during the coincident peak hour.

- 31. It is reasonable and appropriate to establish reconnection fees at \$11.50.
- 32. The revised rate design in Halley Rebuttal Exhibit No. 1, which eliminates the proposed two-year phase-in originally proposed by NRLP, provides a reasonable and appropriate Rate of Return Index for allocation of the rate increase by customer class in this proceeding.
- 33. A 6.165% overall rate of return is reasonable and appropriate for the purposes of this proceeding. The overall rate of return reasonably reflects a hypothetical capital structure for NRLP consisting of 50% debt and 50% equity, a cost rate for long term debt of 3.23%, and a rate of return on common equity of 9.10%.
- 34. NRLP's revenues from its retail operations for the twelve months ended December 31, 2021, by customer class under present base rates and as increased to meet the agreed-upon revenue increase requirement will be as follows:

Customer	Present	Proposed	Proposed	Proposed	Proposed
Class	Base Rate	Base Rate	PPA	Net	Net
	Revenue	Revenue	Revenue	Revenue	Percentage
			Reduction	Increase	Increase
Residential	\$6,899,316	\$8,107,101	\$(639,103)	\$568,682	8.2%
Commercial	\$2,346,323	\$2,947,677	\$(233,511)	\$367,843	15.7%
General					
Commercial	\$5,860,491	\$7,795,868	\$(736,941)	\$1,198,435	20.4%
Demand					
ASU	\$3,625,006	\$4,092,594	\$(444,922)	\$22,667	0.6%
Campus					
Security	\$231,057	\$306,953	\$(26,448)	\$49,447	21.4%
Lighting <sup>2</sup>					
Total	\$18,962,192	\$23,250,192	\$(2,080,926)	\$2,207,074	11.6%

35. It is appropriate and reasonable to continue the current procedure and method used to determine the annual PPA rider, which was first approved in Docket No. E-34, Sub 38. The base purchased power cost factor reflected in the base revenues and established in this proceeding for use in future PPA Rider proceedings is \$0.072769 per kWh (excluding the North Carolina regulatory fee).

- 36. NRLP should pursue grant funding opportunities for cost effective demand side management and energy efficiency (DSM/EE) programs.
- 37. It is reasonable and appropriate for NRLP and the Public Staff to discuss an appropriate calculation of NRLP's recommended revenue requirement prior to

<sup>&</sup>lt;sup>2</sup> The amounts represented here include the Security Lighting's allocated share of purchased power, operating costs, and return on distribution system rate base. The reimbursement for the cost of the light fixture itself is accounted for in the total monthly charge for each specific light type. The fixture related charges would account for an additional \$44,883. See Halley Settlement Exhibits REH-16, lines 208 and 209.

NRLP's next general rate case. Per the Stipulation, the Public Staff should provide NRLP with template schedules to assist the utility in its calculations.

# **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-6**

The evidence supporting these Findings of Fact is contained in the verified Application; the testimony and exhibits presented by the parties; and the Commission's records. These Findings of Fact are essentially informational and uncontroversial in nature.

#### **EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7**

The evidence supporting this Finding of Fact is contained in the verified Application; the testimony and exhibits of the Parties; the testimony of certain public witnesses, and the Commission's records.

At the public hearing on May 23, 2023, David Jackson on behalf of the Boone Area Chamber of Commerce praised NRLP for the reliability of electric service and the responsiveness of the utility's staff. Similarly, customer Chris Thaxton spoke of the professionalism of NRLP in converting certain overhead lines to underground lines in an area where fallen trees during storms had caused many outages, and the improved reliability that resulted. Customers Perry Yates, Jeff Deal, and Amber Mellon each testified that they were pleased with the level of service from NRLP. As Public Staff witness McLawhorn testified, however, many NRLP customers expressed concerns around net metering/billing in general and expressed interest in seeing more opportunities for customer-owned distributed

energy resources directly connected to its distribution system. At the public hearing, Nancy LaPlaca, who thereafter intervened, expressed considerable concern that NRLP is overly reliant on fossil fuels. No customer testified that the quality of their electric service was poor or inadequate.

Public Staff witness McLawhorn testified "Overall, I conclude that the quality of service provided by NRLP to its customers is good."

NRLP witness Miller testified that key performance reliability indicators for NRLP are significantly more favorable than other utilities in the State, including the System Average Interruption Duration Index and System Average Interruption Frequency Index. He described capital projects that NRLP has completed recently to improve the quality of service, including a new SCADA system, undergrounding of lines in an area vulnerable to outages, an improved warehouse and laydown yard, and a new campus substation.

The Commission concludes that the electric service provided by NRLP to its customers is good.

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 8-37

The evidence supporting these Findings of Fact is contained in the verified Application; the Stipulation; the testimony and exhibits of all the parties; and the Commission's records. The Stipulation is supported by the testimony of NRLP witness Halley and Public Staff witnesses McLawhorn, Hinton, and Zhang. Parts of the Stipulation were opposed by witnesses LaPlaca, Hoyle, and Barnes.

Testimony filed prior to the Stipulation by NRLP witnesses Halley, Miller, Stark, and Jamison, and Public Staff witnesses McLawhorn, Morgan, Johnson, and Hinton included issues that were initially contested between the Public Staff and NRLP, and then later resolved in the Stipulation. Accordingly, in addition to parts of the NRLP requests in this proceeding that were not challenged by any other party and were supported by the testimony and exhibits of NRLP, the evidence supporting these Findings of Fact can be grouped as Public Staff Recommendations That Were Not Opposed by Other Parties; Settlement Issues That Were Not Opposed by Other Parties.

## A. Public Staff Recommendations That Were Not Opposed by Other Parties

Certain recommendations in the Public Staff's direct testimony that were accepted by NRLP in its rebuttal testimony, were reflected in the Stipulation, and were not opposed by the other parties (Ms. LaPlaca and Appalachian Voices). Those recommendations are:

- NRLP shall file an annual report on NBR credits, consumption patterns,
   revenues, and costs in conjunction with each PPA proceeding.
- Renewable energy credits (certificates) shall be retained by the customers on the NBR Rate Schedule.
- The NBR rate design and resetting process shall be reviewed in five years or the next NRLP rate case, whichever is earlier.

- To the extent the PPR is approved, the PPR energy credit shall be based on total system avoided costs, with this calculation to be provided in the NRLP compliance filing made pursuant to this Order, and to be updated with each subsequent PPAC filing.
- Renewable energy credits (certificates) shall be retained by the customers on the PPR Rate Schedule if the PPR is approved.
- The PPR rate and design shall be reviewed during each biennial avoided cost proceeding beginning in 2025, if the PPR is approved.
- IR credits shall be paid only to participating customers who actually curtail during the coincident peak hour.

Upon review of the foregoing modifications to NRLP's original direct testimony and Application, the Commission concludes that they are reasonable and appropriate.

# B. Settlement Issues That Were Not Opposed by Other Parties

Certain positions accepted for purposes of settlement among the Stipulating Parties, as provided in the Stipulation and set out below, were not opposed by the non-stipulating parties (Ms. LaPlaca and Appalachian Voices).

## **UBIT Deferral**

In Docket No. E-34, Sub 55, NRLP requested that Unrelated Business Income Tax expenses incurred since 2019 be deferred to a regulatory asset and recovered through amortization in rates. The Public Staff had opposed the deferral request for UBIT. For settlement purposes, the Stipulating Parties agreed to allow the deferral of the 2023 UBIT estimated amount of \$364,646 over a three-year amortization period, with a reduction to the regulatory asset in the event that the actual amount of UBIT is lower than \$364,646, such that NRLP will reduce the deferral to the actual amount of UBIT expense paid by NRLP. In the event the actual amount of UBIT is greater than the estimate, NRLP will not seek recovery on the amount over \$364,646. Additionally, NRLP will place all over-amortization amounts from the deferral (anything over 36 months) into a regulatory liability account to be refunded back to ratepayers with interest at NRLP's weighted average cost of capital over a period to be determined in the next general rate case.

Appalachian Voices and Ms. LaPlaca did not oppose this part of the Stipulation.

The Commission concludes that the resolution of the UBIT issue in the Stipulation is reasonable and appropriate in the context of the settlement as a whole.

# **Campus Substation Deferral**

In Docket No. E-34, Sub 55, NRLP requested that post in-service depreciation and financing costs for its new campus substation be deferred to a regulatory asset and recovered through amortization in rates. NRLP also requested a three-year amortization of the unrecovered balance of the old campus substation that had been decommissioned. The Public Staff reduced the net book value of the old campus substation by updating it to July 31, 2023. They also reduced the amount of depreciation and return for the new campus substation by calculating it for only seven months, and recommended amortizing that deferral over the useful life of the new substation instead of three years. For settlement purposes, the Stipulating Parties agreed to the Public Staff's position, and additionally agreed that any over-amortization amounts for either substation deferral should be recorded in a regulatory liability account to be refunded to ratepayers with interest at the Company's weighted average cost of capital over a period to be determined in the next general rate case.

Appalachian Voices and Ms. LaPlaca did not oppose this part of the Stipulation.

The Commission concludes that the resolution of the campus substation deferral issues in the Stipulation is reasonable and appropriate in the context of the settlement as a whole.

# Inflation Adjustment

NRLP had originally proposed a 6.6% inflation adjustment for expenses that were not otherwise given category-specific pro forma adjustments. The Public Staff recommended an adjustment that applied a 3.13% inflation factor based on the average of the Consumer Price Index Urban (CPI) rates from December 2021 and December 2022. In rebuttal, witness Halley observed that the actual increase that NRLP experienced in operating expenses for 2022 was much greater than the CPI.

Settlement Exhibit 1, filed with the testimony of Public Staff witness Zhang, reflects the resolution of the inflation adjustment by the Stipulating Parties by including the actual operating expense increases experienced by NRLP.

Appalachian Voices and Ms. LaPlaca did not oppose this part of the Stipulation.

The Commission concludes that the resolution of the inflation adjustment issue in the Stipulation is reasonable and appropriate in the context of the settlement as a whole.

# Customer Growth and Usage Adjustments

The Public Staff's direct testimony made a substantial adjustment for customer growth and usage based on statistical analysis. In rebuttal, witness Halley maintained that the actual kWh sales increase for 2022 was significantly lower than the Public Staff's statistical analysis projected, and that the Public Staff

did not offset increased sales revenue with increased purchased power costs. In settlement, the Stipulating Parties agreed to remove the Public Staff's usage adjustment and account for an appropriate level of corresponding purchased power costs for increased energy sales from the customer growth adjustment.

Appalachian Voices and Ms. LaPlaca did not oppose this part of the Stipulation.

The Commission concludes that the resolution of the customer growth and usage issues in the Stipulation is reasonable and appropriate in the context of the settlement as a whole.

## Rate Case Expense

In the present case, the Stipulating Parties have agreed to an adjustment to the earlier rate case expense estimate. Per the Stipulation, NRLP "shall not be entitled to seek additional rate case expense, if any, that exceeds the total amount agreed upon by the Stipulating Parties; nor shall there be an adjustment if actual rate case expense were to be less."

Appalachian Voices and Ms. LaPlaca did not oppose this part of the Stipulation.

The Commission concludes that the resolution of rate case expense in the Stipulation is reasonable and appropriate in the context of the settlement as a whole.

# Reconnection Fees

In its Application, NRLP proposed to maintain its current reconnection fees. The Public Staff's direct testimony recommended that the fee be reduced due to NRLP's ability to accomplish remote disconnections and reconnections with its AMI metering technology, but did not recommend a specific level. The Stipulation includes for an \$11.50 reconnection fee, reduced from the current fee of \$25.00 (during business hours) and \$60.00 (during non-business hours).

Appalachian Voices and Ms. LaPlaca did not oppose this part of the Stipulation.

The Commission concludes that the resolution of the reconnection fee in the Stipulation is reasonable and appropriate in the context of the settlement as a whole.

# Rate Design Allocation Among Customer Classes

In direct testimony, NRLP proposed a two-year phase-in of the rate increase to the Commercial Demand class. The Public Staff opposed that approach because of the one-year impact on other customer classes. In rebuttal, NRLP accepted the Public Staff's position and provided a specific allocation of revenue requirement among all customer classes, without any phase-in for Commercial Demand customers, based on recommended class rates of return and rates of return indices, which is shown in Halley Rebuttal Exhibit No. 1. The Stipulation

accepts this approach of achieving specified rates of return by class for whatever revenue requirement is approved.

Appalachian Voices and Ms. LaPlaca did not oppose this part of the Stipulation.

The Commission concludes that the resolution of the allocation of revenue requirement among customer classes, including the elimination of the phase-in proposal for the Commercial Demand class, as specified in the Stipulation is a reasonable and appropriate part of rate design.

## Settlement Exhibit I Accounting Line Items

In his direct testimony, Witness Halley stated that NRLP requested a revenue increase of \$4,624,749 from its base rates. The increase request is partially offset by a decrease in PPAC revenue of \$2,026,355. In its amended testimony Exhibit filed on April 10, 2023, NRLP revised the requested base rate revenue increase to \$4,671,936. The amount of increase resulting from a rate base amount of \$30,964,515.

The Public Staff recommended a revenue increase of \$4,116,670 in its prefiled testimony. After the filing of the Public Staff's pre-filed testimony, the Public Staff and NRLP entered into the Stipulation. For settlement purposes, the Stipulating Parties agreed to the amounts related to net original cost rate base, operating revenue deductions, and operating revenue which set forth in Settlement Exhibit I, Schedules 2 and 3 filed with the settlement testimony of Public Staff witness Zhang, and includes the following items:

- The original cost rate base for purposes of this proceeding, consisting of electric plant in service, accumulated depreciation, investment in capital credits, regulatory assets and liabilities, materials and supplies inventory, prepaid expenses, working capital, and customer deposits, is \$31,441,744. The rate base consists of the following items:
  - Electric plant in service of \$39,092,563 at the end of the test year, as
     adjusted to reflect certain post-test year additions.
  - Accumulated depreciation as of the end of the test year, as adjusted to reflect certain post-test year additions, of \$(16,527,900).
  - Investment in capital credits of \$6,851,122.
  - Regulatory assets amount of \$839,928.
  - Materials and supplies inventory of \$627,742.
  - o Prepaid expenses of \$83,469.
  - o Customer deposits amount of \$(229,105).
  - Working capital of \$482,565 for purchased power expense and \$221,360 for other Operations & Maintenance (O&M) expenses.
- The pro forma test year amount of operating revenue deductions reasonable and appropriate for purposes of this proceeding is \$22,088,315, and consists of the following items:
  - Operation and maintenance expenses of \$20,316,069.

- Depreciation expense of \$1,112,671.
- Amortization of regulatory assets and liabilities of \$154,596.
- Regulatory fee expense of \$32,487.
- Gain on sale of utility property of \$(9,996).
- Interest on customer deposits in the amount of \$14,141.
- Rate case expense in the amount of \$140,320.
- Unrelated Business Income Tax in the amount of \$328,027.
- Operating revenues under present rates for purposes of this proceeding are \$19,738,694, consisting of \$19,665,634 in electric sales revenues and \$73,060 in other operating revenues.

Appalachian Voices and Ms. LaPlaca did not oppose these amounts that were incorporated by reference into the Stipulation between the Public Staff and NRLP.

The Commission concludes that the foregoing amounts related to net original cost rate base, operating revenue deductions, and operating revenue, as set forth in Settlement Exhibit I, are reasonable and appropriate for use in this proceeding.

# Calculation of revenue requirement in future rate cases

The evidence supporting this finding of fact is found in the Stipulation, which provides in relevant part:

The Stipulating Parties agree the Company and the Public Staff will work together prior to the Company's next general rate case to assist the Company with appropriately calculating its recommended revenue requirement. The Public Staff has agreed to provide the Company with template schedules to assist the Company in its calculations. Additionally, the Stipulating Parties have agreed to meet at least one-month prior to the filing of the Company's next general rate case to review and discuss the Company's proposed calculations.

The foregoing provision in the Stipulation has not been contested by any party. It signals a good faith intention among the Stipulating Parties to improve communication and efficiency in preparing the next rate case. The Commission concludes that this is reasonable.

### C. Settlement Issues That Were Opposed by Other Parties

The Stipulation and the testimony of NRLP and Public Staff witnesses address proposed rate schedules for customers with solar generation, DSM/EE, and the Basic Facilities Charge. The Stipulation also provides for a settlement cost of capital. Intervenors LaPlaca and Appalachian Voices oppose the NRLP position on the NBR rate. Appalachian Voices also opposes the NRLP position on DSM/EE, Basic Facilities Charge, and cost of capital.

# Cost of Capital

The rate of return, especially the return on common equity capital (ROE), is often one of the most contentious issues to be addressed in a rate case. In order to reach an appropriate independent conclusion regarding the weighted average cost of capital, otherwise called the overall rate of return, the Commission should

evaluate the available evidence, particularly that presented by conflicting expert witnesses. *State ex rel. Util's. Comm'n v. Cooper*, 366 N.C. 484, 739 S.E.2d 541, 546-47 (2013) (*Cooper I*). In this case, the evidence relating to NRLP's cost of capital was presented by NRLP witnesses Halley and Jamison, Public Staff witness Hinton, and Appalachian Voices witness Hoyle.

In order to give full context to the Commission's decision herein and to elucidate its view of the requirements of the General Statutes as they relate to rate of return, including the ROE as interpreted by the Supreme Court in *Cooper I*, the Commission deems it important to provide in this Order an overview of the general principles governing this subject. While much of the following discussion from prior Commission decisions is focused on ROE, the underlying principles also apply to cases where the Commission must exercise judgment in deciding whether an imputed capital structure and imputed cost of debt are preferable to using the actual capital structure and cost of debt.

# Law Governing the Commission's Decision on Rate of Return

In the absence of a unanimous settlement, the law of North Carolina requires the Commission to exercise its independent judgment and arrive at its own independent conclusion as to the proper rate of return on common equity. See, e.g., State ex rel. Util's. Comm'n v. Carolina Util. Customers Ass'n, 348 N.C. 452, 466, 500 S.E.2d 693, 707 (1998) (CUCA I). This legal principle applies as well to disputes regarding the appropriate capital structure and cost rate for long-term debt. To reach an appropriate independent conclusion regarding the rate of return

on equity, the Commission must evaluate the available evidence, particularly that presented by conflicting expert witnesses. *Cooper I*, 366 N.C. at 491-93, 739 S.E.2d at 546-47.

As this Commission has previously acknowledged, relying upon the decisions of the United States Supreme Court in *Bluefield Water Works* & *Improvement Co. v. Pub. Serv. Comm'n of W. Va.*, 262 U.S. 679 (1923) (*Bluefield*), and *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) (*Hope*):

To fix rates that do not allow a utility to recover its costs, including the cost of equity capital, would be an unconstitutional taking. In assessing the impact of changing economic conditions on customers in setting an ROE [rate of return on equity], the Commission must still provide the public utility with the opportunity, by sound management, to (1) produce a fair profit for its shareholders, in view of current economic conditions, (2) maintain its facilities and service, and (3) compete in the marketplace for capital.

Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction, Docket No. E-7, Sub 1146, pp. 49-50 (N.C.U.C June 22, 2018); see also State ex rel. Utils. Comm'n v. General Telephone Co. of the Southeast, 281 N.C. 318, 370, 189 S.E.2d 705, 738 (1972) (General Telephone). As the North Carolina Supreme Court held in General Telephone, these factors constitute "the test of a fair rate of return declared" in Bluefield and Hope. Id.

The rate of return on equity is, in fact, a cost. The return that equity investors require represents the cost to the utility of equity capital:

[T]he cost of capital to the utility is synonymous with the investor's return, and the cost of capital is the earnings which must be

generated by the investment of that capital in order to pay its price, that is, in order to meet the investor's required rate of return.

Morin, Roger A., *Utilities' Cost of Capital* 19-21 (Public Utilities Reports, Inc. 1984), "The term 'cost of capital' may [also] be defined as the annual percentage that a utility must receive to maintain its credit, to pay a return to the owners of the enterprise, and to ensure the attraction of capital in amounts adequate to meet future needs." Phillips, Charles F., Jr., The Regulation of Public Utilities (Public Utilities Reports, Inc. 1993), at 388. The North Carolina Supreme Court has long recognized that the Commission's subjective judgment is a necessary part of determining the authorized rate of return on common equity. *See, e.g., State ex rel. Utils Comm'n v. Public Staff-N.C. Util's. Comm'n*, 323 N.C. 481, 490, 374 S.E.2d 361, 369 (1988) (*Public Staff*). Likewise, the Commission has quoted favorably from a prominent treatise to the effect that such determination is not made by application of any one simple mathematical formula:

Throughout all of its decisions, the [United States] Supreme Court has formulated no specific rules for determining a fair rate of return, but it has enumerated a number of guidelines. The Court has made it clear that confiscation of property must be avoided, that no one rate can be considered fair at all times and that regulation does not guarantee a fair return. The Court also has consistently stated that a necessary prerequisite for profitable operations is efficient and economical management. Beyond this is a list of several factors the commissions are supposed to consider in making their decisions, but no weights have been assigned.

The relevant economic criteria enunciated by the Court are three: financial integrity, capital attraction and comparable earnings. Stated another way, the rate of return allowed a public utility should be high enough: (1) to maintain the financial integrity of the enterprise, (2) to enable the utility to attract the new capital it needs to serve the public, and (3) to provide a return on common equity that

is commensurate with returns on investments in other enterprises of corresponding risk. These three economic criteria are interrelated and have been used widely for many years by regulatory commissions throughout the country in determining the rate of return allowed public utilities.

In reality, the concept of a fair rate of return represents a "zone of reasonableness." As explained by the Pennsylvania commission:

There is a range of reasonableness within which earnings may properly fluctuate and still be deemed just and reasonable and not excessive or extortionate. It is bounded at one level by investor interest against confiscation and the need for averting any threat to the security for the capital embarked upon the enterprise. At the other level it is bounded by consumer interest against excessive and unreasonable charges for service.

As long as the allowed return falls within this zone, therefore, it is just and reasonable. . . . It is the task of the commissions to translate these generalizations into quantitative terms.

Charles F. Phillips, Jr., The Regulation of Public Utilities, 3d ed. 1993, pp. 382 (notes omitted).

Order Granting General Rate Increase, *Application of Carolina Power & Light Co.,* d/b/a Progress Energy Carolinas, Inc., for Adjustment of Rates and Charges Applicable to Electric Utility Service in North Carolina, Docket No. E-2, Sub 1023, pp. 35-36 (N.C.U.C. May 30, 2013), aff'd, State ex rel. Utils. Comm'n v. Cooper, 367 N.C. 444, 761 S.E.2d 640 (2014) (2013 DEP Rate Order).

Moreover, in setting rates the Commission must not only adhere to the dictates of both the United States and North Carolina Constitutions but, as has been held by the North Carolina Supreme Court, it must set rates as low as possible consistent with constitutional law. *Public Staff*, 323 N.C. at 490, 374

S.E.2d at 370. The Commission must also set rates employing the multi-element formula set forth in N.C.G.S. § 62-133. The formula requires consideration of elements beyond just the rate of return on common equity element, and inherently requires the Commission's subjective determinations. These subjective decisions can and often do have multiple and varied impacts on other elements of the formula. In other words, the formula elements are intertwined and often interdependent in their impact to the setting of just and reasonable rates.

The qualitative and subjective nature of determining an appropriate rate of return for utility ratemaking purposes, rather than a rigid or formulaic approach, has been recognized by the United States Supreme Court, which observed that "[t]he economic judgments required in rate proceedings are often hopelessly complex and do not admit of a single correct result." *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 314 (1989). The Court stated:

To declare that a particular method of rate regulation is so sanctified as to make it highly unlikely that any other method could be sustained would be wholly out of keeping with this Court's consistent and clearly articulated approach to the question of the Commission's power to regulate rates. It has repeatedly been stated that no single method need be followed by the Commission in considering the justness and reasonableness of rates.

*Id.* at 316 (citations, quotations, and brackets omitted).

The fixing of a rate of return on the cost of property used and useful to the provision of service (as determined through the end of the historic 12-month test period prior to the proposed effective date of a requested change in rates and adjusted for proven changes occurring up to the close of the expert witness

hearing) is but one of several interdependent elements of the statutory formula to be used in setting just and reasonable rates. See N.C.G.S. § 62-133. Section 62-133(b)(4) provides, in pertinent part, that the Commission shall:

[f]ix such rate of return on the cost of the property . . . as will enable the public utility by sound management [1] to produce a fair return for its shareholders, considering changing economic conditions and other factors . . . . [2] to maintain its facilities and services in accordance with the reasonable requirements of its customers in the territory covered by its franchise, and [3] to compete in the market for capital funds on terms that are reasonable and that are fair to its customers and to its existing investors. [Emphasis added.]

The North Carolina Supreme Court has interpreted the above-emphasized language as requiring the Commission to make findings regarding the impact of changing economic conditions on customers when determining the proper rate of return on common equity for a public utility. *Cooper I*, 366 N.C. at 495, 739 S.E.2d at 548. The Commission must exercise its subjective judgment so as to balance two competing rate of return on common equity-related factors — the economic conditions facing the Company's customers and the Company's need to attract equity financing on reasonable terms in order to continue providing safe and reliable service. 2013 DEP Rate Order at 35-36. The Commission's determination in setting rates pursuant to N.C.G.S. § 62-133, which includes the fixing of the rate of return on common equity, must also credit affordability of public utility service to the using and consuming public. The impact of changing economic conditions on customers is embedded in the analyses conducted by the expert witnesses on rate of return on common equity, as the various economic models widely used and

accepted in utility regulatory rate-setting proceedings reflect such economic conditions. 2013 DEP Rate Order at 38. Further,

[t]he Commission always places primary emphasis on consumers' ability to pay where economic conditions are difficult. By the same token, it places the same emphasis on consumers' ability to pay when economic conditions are favorable as when the unemployment rate is low. Always there are customers facing difficulty in paying utility bills. The Commission does not grant higher rates of return on common equity when the general body of ratepayers is in a better position to pay than at other times . . . .

*Id.* at 37. Economic conditions existing during the modified test year, at the time of the public hearings, and at the date of the issuance of the Commission's order setting rates will affect not only the ability of the utility's customers to pay rates but also the ability of the utility to earn the authorized rate of return during the period the new rates will be in effect. However, in setting the rate of return on common equity, just as the Commission must assess the impact of economic conditions on customers' ability to pay for service, it must also assess the effect of regulatory lag on the Company's ability to access capital on reasonable terms. The Commission sets the rate of return on equity considering both of these impacts taken together in its ultimate decision fixing a utility's rates.

Thus, in summary and in accordance with the applicable law, the Commission's duty under N.C.G.S. § 62-133 is to set rates as low as reasonably possible to the benefit of the customers without impairing the Company's ability to attract the capital needed to provide safe and reliable electric service and recover its cost of providing service.

# Summary of the Cost of Capital Evidence

The following summary highlights major points presented by the parties; it is not intended to be a full recital of all the evidence on cost of capital. The Commission has reviewed all of the cost of capital evidence in this proceeding, including evidence not summarized below.

NRLP testified in its direct case in support of an imputed capital structure of 48% debt and 52% equity, an imputed long-term debt cost rate of 4.20%, and a 9.60% rate of return on common equity (ROE), combining to produce a 7.007% overall return (weighted average cost of capital) for ratemaking purposes. Witness Halley indicated that the actual capital structure was 21.7% long-term debt and 78.3% equity, with a 2.30% embedded cost of debt. He testified that NRLP is a state-run utility that does not have publicly traded stock, but that a risk-based cost of equity should be recognized in the present case as the Commission has done in prior NRLP cases. He noted that NRLP's financing depended on retained earnings as well as a modest amount of debt. Witness Halley based his 9.60% ROE recommendation on the ROEs approved in Docket Nos. G-9, Sub 781, and G-5, Sub 632, because those were the most recent Commission decisions for distribution-only utilities. Likewise, he recommended a debt cost rate of 4.20% because that was the average debt cost approved by the Commission in those same two natural gas distribution utility cases. He also compared the national average of ROEs for regulated electric utilities, and actual earned and estimated earned returns for electric utilities as reported by Value Line.

Of some relevance to the impact of changing economic circumstances on customers is the testimony of NRLP witness Miller that NRLP had the lowest residential electric rates in North Carolina as reported by the U.S. Energy Information Administration. He further testified at hearing that the average residential bill, based on 1,000 kWh of usage in a month, that would result from the DEP and DEC proposed rates would be higher than a 1,000-kWh bill under NRLP proposed rates, and that the Stipulation would lower the average NRLP bill even more. This evidence shows the affordability of electric service for NRLP customers compares favorably with other utility providers in North Carolina.

The Public Staff direct case proposed a 50% debt and 50% equity capital structure, a long-term debt cost rate of 3.23%, and an ROE of 8.90%, which combined to produce an overall return of 6.07%.

Witness Hinton developed his debt cost recommendation by using the 2.73% embedded weighted average cost of NRLP debt as of December 31, 2022, and imputing an additional \$4.5 million of debt to reflect the higher debt ratio in his recommended capital structure relative to the actual debt ratio. He derived an imputed debt cost for the \$4.5 million at 4.35% based on May 11, 2023, spreads from U.S. Treasury yields. The weighted average of the embedded debt cost and the imputed debt cost was 3.23%.

Witness Hinton developed his ROE recommendation by conducting three Discounted Cash Flow (DCF) analyses with a proxy group of electric utilities. He also conducted a Risk Premium analysis based on a regression of allowed ROEs

for distribution-only electric utilities and Moody's index yields for A-rated utility bonds. Witness Hinton then averaged all three DCF results and the Risk Premium result to arrive at a recommended ROE of 8.90%.

Appalachian Voices witness Hoyle recommended a 5.39% overall return for NRLP. He testified in favor of using the actual capital structure of 22% long-term debt and 78% equity, with the long-term debt cost rate of 2.3% presented in the direct testimony of NRLP, and an ROE of 6.25%.

Witness Hoyle maintained that NRLP's recommended ROE was not cost-based, that there are no investors to whom a return must be paid, and that financing could be obtained at a much lower rate by debt issuances. He also criticized NRLP's lack of a DCF analysis. He opined that the two gas distribution companies whose approved ROEs were the basis of NRLP's ROE recommendation were not, in fact, comparable to the low level of risk for NRLP. Witness Hoyle recommended a 6.25% ROE on the basis of recent municipal bond rates as high as 5%, with an added 1.25% for debt service coverage.

Witness Hoyle further recommended that:

First, the Commission should direct NRLP to move to actual, cost-based values as a basis for ROE, cost of debt, ROR, and capital structure in this case and in future cases. Second, the Commission should direct NRLP to develop a DCF analysis and develop a comprehensive financing strategy that optimizes the capital structure for the utility in light of its status as an operating unit of ASU. Third, the Commission should direct NRLP to submit a compliance filing for its ROR, based on its DCF analysis.

In rebuttal, witness Halley observed that an inadequate overall return would result in "less funds available from retained earnings to finance capital projects, react to unexpected contingencies, and manage cash flow volatility." He added that because NRLP cannot issue stock to raise funds in the event of a shortfall in retained earnings, its only alternatives would be to issue more debt than reasonable or jeopardize the reliability of its electric service.

The complications of issuing more debt were highlighted in the rebuttal testimony of witness David Jamison, the Controller for Appalachian State University. He noted, "The University is limited in the amount of debt that can be added to its balance sheet without exceeding target metrics defined in our Debt Management policy, which establishes our debt capacity." He testified that the University follows the same principles and targets for debt issued for NRLP operations, and that debt issuances can be a lengthy process that requires approval from the UNC System Office and the Office of State Management and Budget for projects over \$750,000. Amounts above that threshold also require approval by the Board of Trustees and Board of Governors. Witness Jamison stated that with respect to utility operations, the University Trustees have delegated authority:

to issue debt for equipment and infrastructure, *provided* that the utility supports the debt service solely from revenues generated by the utility so that it does not encumber or burden the Institution or the State. This means that the University, in consultation with its financial advisors and bond counsel, takes the same steps in analyzing the ability for a project undertaken by NRLP to service the debt from its available funds. As an independent operation, NRLP must maintain an appropriate level of cash and equity to be able to support its debt

service obligations and maintain its fixed operating costs in instances when revenue streams may unexpectedly decline. (The unexpected increase in natural gas prices in December followed by the recent unseasonably warm winter is such an example. . . .)

He added that General Revenue Bonds differ from utility system debt in that utility debt must be paid exclusively from utility revenues. To protect against contingencies such as the natural gas price spike of last winter -- which forced NRLP to rely on emergency short-term borrowing and to seek an interim purchased power adjustment -- witness Jamison testified that the utility should maintain a minimum of three to six months' of operating cash reserves. Consequently, NRLP must be responsible for payment of its own debt, not simply rely on University General Revenue Bonds, and should have retained earnings sufficient to keep healthy operating cash reserves, which will support more favorable debt interest rates. He opined that an ROE below what other distribution-only utilities can earn would not be fiscally responsible, as depleted reserves put the utility in a position of increased risk.

Witness Jamison also addressed the NRLP practice of providing some of its net earnings to the University Endowment Fund. He noted that net profits from utility operations are required by N.C.G.S. § 116-35 to be paid into the Endowment Fund. This statute shows a legislative intent for utility operations to be a source of funding for university endowments. It is analogous to an investor-owned utility paying dividends to its shareholders. According to witness Jamison, this means NRLP should not be treated differently from investor-owned utilities with regard to ROE.

Witness Halley testified in rebuttal that the 8.90% ROE and overall return recommendations of the Public Staff were far below recent decisions by the Commission for other utilities. He further noted that the Public Staff's own Hinton Exhibit 1 showed a 9.17% average approved ROE for distribution utilities nationally for 2022 and 2023, with an uptick to 9.70% for the one case reported so far in 2023. Witness Halley testified that the Public Staff ROE recommendation was calculated by triple weighting its low DCF results against its Risk Premium result, contrary to the Public Staff's methodology in prior cases. He additionally testified that Appalachian Voices departed from regulatory principle and past Commission decisions for NRLP by recommending an equity return based on a fixed debt cost rate.

The Public Staff and NRLP settled on a 6.165% overall rate of return in the Stipulation. That return is based on a 50% equity and 50% long-term debt capital structure, a cost rate of 3.23% for long-term debt, and an ROE of 9.10%.

#### Conclusions on Rate of Return

The Stipulation terms on cost of capital are but one part of the evidence, and the Commission has additionally evaluated the direct and rebuttal evidence of the rate of return witnesses.

NRLP relied on a relatively simple analysis in direct testimony, primarily drawing a comparison to the authorized returns for two other distribution utilities decided by the Commission. The Commission gives that testimony some weight,

as distribution companies do have a risk profile different from vertically integrated utilities, and those decisions are relatively recent. However, NRLP has the unique trait of being a business operation within a state agency and does not have shareholders. This characteristic makes comparison to the ROEs of investor-owned utilities somewhat difficult, at least in the absence of analysis of risk more specific to NRLP.

The uniqueness of NRLP as a government entity does not mean the utility should be denied an investor-level equity return like other regulated electric utilities in North Carolina receive. The Commission agrees with NRLP witness Jamison that under N.C.G.S. § 116-35 it is proper for NRLP to have "net profits" that it remits to the University. Most importantly, retained earnings are the source of capital reserves and most of the funding for NRLP capital projects. Using a lower bond (e.g., debt) rate level to establish a return on equity, as witness Hoyle proposes, is not only unsupported by any Commission precedent and even contrary to one of the sources Hoyle cites (T Vol 2, p. 127, I.10 to p. 128, I.4), but would also significantly erode the amount of capital reserves and amount of funds available for capital projects and operational contingencies. An ROE more suited to an investor utility, but taking into account the risk profile of NRLP, is essential to financial stability for the utility and ultimately that will benefit customers.

The distinguishing trait of state agency status is more relevant to the determination of a reasonable debt cost rate for NRLP – in contrast to the consideration of the appropriate return on equity – because, all else being equal,

government agencies have access to bond financing at lower rates due to the interest being tax-exempt. At the same time, the Commission does not agree that government agency status necessarily lowers the risk profile. Credit ratings of government agencies can vary depending on management and financial status. Moreover, the full faith and credit of the State may back general revenue bonds, but NRLP is expected to pay its debt obligations through its own revenue stream rather than rely on funding contributions from the University or State.

Witness Hinton testified that the management of NRLP does not face the same commitment, accountability, and pressures to provide its equity investors a risk-adjusted rate of return as do other investor-owned utilities. However, witness Hinton testified that the operational risks and purchase power risks with NRLP is such that this Company needs an equity return to generate spare funds to be in a financial position to address such risks. Upon cross-examination by Appalachian Voices, witness Hinton said he acknowledged this unique aspect, and he structured his comparable group with relatively low investment-risk electric utilities.

At the same time, other characteristics of NRLP implicate risks that are not present with most other electric or distribution utilities. In particular, witness Miller noted that due to serving a college town with a high proportion of rental housing, NRLP see two-thirds of its customers leave every five years. Additionally, NRLP has no industrial customers and very limited large commercial load. And with only a few substations and interconnection points to BREMCO, NRLP has less redundancy and flexibility in case of emergencies than larger electric utilities.

The Commission also gives weight to the direct testimony of Public Staff witness Hinton. He was the only witness to perform traditional ROE analyses – the DCF and Risk Premium models. He was also the only witness to address the impact of changing economic conditions on customers.

Witness Hinton's DCF results ranged from 8.49% with use of historical growth rates for earnings per share, dividends per share, and book value per share; 8.62% with use of both historical and Value Line forecasted growth rates; and 8.80% with use of various analysts' five-year earnings per share forecasts shown on the Yahoo Finance website. He also noted that the average allowed ROE for distribution-only providers was 9.19%.

Appalachian Voices witness Hoyle's recommendation to base the ROE on municipal bond rates is not appropriate. The Commission concludes that the equity component of a utility capital structure should be based on equity returns, not debt rates. Bonds have a higher payment priority than equity, so they are less risky and should have lower required rates of return than with common equity.<sup>3</sup> If NRLP were to finance its capital needs entirely at the cost rate of bonds, it would need to compensate for the loss of retained earnings. A utility that seeks financing in capital markets and is at or close to 100% debt would have significantly increased risk for lenders compared to a utility with a balanced capital structure. The proposal of

<sup>&</sup>lt;sup>3</sup> Witness Hoyle's analysis of debt rates also failed to distinguish between general obligation bonds and revenue bonds. (T. Vol. 2, p. 118 l.5 to p. 119, l.2). here is no evidence in the record of relevant revenue-bond rates as a premise for witness Hoyle's ROE analysis.

Appalachian Voices is contrary to good ratemaking policy and the last Commission docket setting rates for NRLP.

The Commission concludes that the Stipulation ROE of 9.10% is reasonable and appropriate for use in this proceeding. It is within the range of analytical model results presented by witness Hinton. It is nine basis points lower than recent ROEs authorized for other electric distribution providers in other states, which serves as a reasonableness check on the modeling results specific to NRLP. While significantly lower than the ROE requested by NRLP in its direct case, NRLP has stipulated to a 9.10% ROE in the context of settlement compromises.

The ROE and debt cost rate approved in this proceeding should be applied to a capital structure of 50% equity and 50% debt. That capital structure is supported by the direct testimony of witness Hinton, it is close to the direct testimony recommendation of NRLP witness Halley, it is accepted in the Stipulation, and it is consistent with capital structures approved by the Commission in other cases and the last rate case for NRLP. As witness Hinton states in his testimony, the 50% equity ratio is approximately the average for electric distribution utilities over the past five years, and appropriate for the lower risk profile of that category of utility. Appalachian Voices witness Hoyle recommended use of the actual NRLP capital structure, with approximately 78% equity and 22% debt. The Commission concludes that an imputed 50% equity and 50% long-term debt capital structure is reasonable and appropriate for use in this proceeding. The cost of debt should be less than the cost of equity, so a balanced debt to equity ratio

will result in lower costs for customers than use of the actual NRLP capital structure.

With regard to the appropriate cost rate for debt, the Commission concludes that 3.23% is reasonable. That debt cost rate is supported by the direct testimony of witness Hinton, and is accepted in the Stipulation. It reflects the updated actual 2.73% average embedded long-term debt cost rate of NRLP, combined with an imputed 4.35% debt cost based on spreads from Treasury yields. This is a reasonable approach for purposes of the present proceeding because 4.35% is the cost rate that NRLP would incur if it were to add debt to achieve a 50% debt ratio in its capital structure, and that debt ratio is reasonable and appropriate as discussed above. Thus 3.23% is the debt cost rate best aligned with the reasonably balanced capital structure approved herein. The 2.30% debt cost rate recommended by witness Hoyle is the historical embedded rate obtained from the direct testimony of witness Halley, which was not as current as the historical cost used by witness Hinton since the NRLP direct testimony was filed at an earlier date, and it does not account for the fact that achieving a 50% debt ratio in the capital structure would require acquisition of debt at a cost rate greater than that historical embedded amount.

Witness Hinton testified that "the impact of changing economic conditions nationwide is inherent in the analytical methods and data I used to determine the cost of equity for utilities that are comparable in risk to NRLP." He also reviewed income data for the Town of Boone and Watauga County, concluding that the

average per capita income for North Carolina is 17% greater than for Watauga County.

Based upon general economic conditions being inherent in the analytical models used by witness Hinton, and the favorable comparison of bills for NRLP residential electric service relative to other electric utilities in North Carolina, and after weighing and balancing factors affected by the changing economic conditions in making the subjective decisions required, the Commission concludes that an allowed rate of return on common equity of 9.10% and an overall return of 6.165% will not cause undue hardship to customers as a whole, even though some customers will struggle to pay the increased rates resulting from this decision.

The Commission finds and concludes that capital investments by NRLP provide significant benefits to its customers. The Commission concludes that the rate of return approved in this proceeding appropriately balances the benefits received by NRLP's customers from NRLP's provision of safe, adequate, and reliable electric service with the difficulties that some customers will experience in paying NRLP's increased rates.

The Commission notes further that its approval of a rate of return on common equity at any level is not a guarantee to the Company that it will earn a return at that level. Rather, as North Carolina law requires, setting the rate of return on common equity at this level merely affords NRLP the *opportunity* to achieve such a return. The Commission finds and concludes, based upon all the evidence presented, that the overall rate of return and the rate of return on equity provided

for herein will provide NRLP with the opportunity to earn a reasonable and sufficient return while at the same time producing rates that are just and reasonable to its customers.

Rates for Customers Providing Renewable Energy to the NRLP Distribution

System

Net Billing Rider (NBR) Rate

NRLP proposed an NBR rate for customers who operate behind-the-meter photovoltaic (PV) generation with a maximum rated AC capacity of the customer's anticipated annual peak kW demand or 20 kW, whichever is less, for residential systems, and the lesser of anticipated annual peak kW demand or 1,000 kW for non-residential systems. Customers on the NBR rate will be charged for energy based on the net kWh purchased from or delivered to NRLP, which means solar energy generated by a customer would directly offset their usage of NRLP energy. Customers who generate more energy than they use in a given month will receive a retail energy rate credit that carries forward to future bills. In its direct testimony and Application, NRLP proposed that Schedule NBR also include a Standby Supplemental Charge (SSC) of \$6.17/kW (AC)/month to recover the costs of distribution facilities required to serve an NBR customer's full load during times when their PV generation is not available.

NRLP initially proposed an annual reset of customer credits from the NBR rate to occur on January 1 each year. The Public Staff agreed with NRLP's initial

proposal for the NBR rate that the energy credit balance be reset to zero on January 1 of each year. In rebuttal, witness Halley stated that the utility was willing to remove the annual reset provision as requested by Appalachian Voices, but that the Public Staff preferred an annual reset, so NRLP was not taking a position on whether to continue with the annual reset. Witness McLawhorn testified that an annual reset of customer credits is intended to reduce intraclass cross-subsidization between participants and non-participants. The Commission finds and concludes that, as recommended by the Public Staff and although NRLP takes no position on the issue, an annual reset of customer credits for the NBR rate to occur on January 1 each year is just and reasonable.

In conjunction with its settlement testimony, NRLP proposed updated Supplemental Standby Charges (SSC or standby charges) of \$5.92/kW/month for residential customers, \$6.39 for Rate Schedule G customers, and \$3.59 for Rate Schedule GL customers. Witness Miller testified that the purpose of standby charges is to recover NRLP's fixed costs from customers whose solar generation lowered their usage from NRLP. Ms. LaPlaca and Appalachian Voices opposed these standby charges as excessive and as a disincentive to renewable energy, as discussed in more detail below.

Public Staff witness McLawhorn testified that the NRLP proposal was a reasonable effort toward compliance with HB 589, which is the 2017 legislation that includes N.C.G.S. § 62-126.4. This law requires electric public utilities to file net metering rates, and further requires that such rates "ensure that the net

metering retail customer pays its full fixed cost of service." While NRLP is regulated pursuant to Chapter 116 rather than as an "electric public utility" under Chapter 62, the public policy applies equally: NBR customers should not have their utility rates subsidized by non-NBR customers, and a standby charge helps ensure the NBR customers pay their allocated share of fixed costs. As noted in the settlement testimony of witness McLawhorn, the Public Staff and NRLP agreed that the standby charge would be reviewed in five years.

Witness LaPlaca primarily testified in opposition to the "buy all / sell all" solar rate that NRLP has offered in the past, and more generally about the climate change consequences from burning fossil fuels to generate electricity. She criticized the standby charge for NBR as being so high it would "kill rooftop solar in Boone."

Witness Barnes provided extensive testimony to support his contention that customer-based solar generation provided more value to NRLP than recognized in the utility's cost of service study, and therefore the standby charge should be eliminated. While he supported the addition of an NBR rate, he maintained the standby charge as calculated by NRLP is unreasonable because:

(1) NRLP's evaluation of the costs and benefits of customer-sited solar is erroneous due to basing the calculation of avoided cost benefits on the volumetric residential retail rate, rather than the unit costs associated with the demand-based cost elements that produce the retail rate.

- (2) NRLP's evaluation of the costs and benefits of customer-sited solar production relies on incomplete solar production data to determine the effective solar capacity contribution towards peak demand hours, and NRLP attempted to "fill in" the data using a methodology that is inconsistent with the shape of a solar production profile.
- (3) NRLP did not include reduced distribution system loading and accompanying avoided distribution capacity benefits in its evaluation based on an assertion that its distribution costs are fixed.
- (4) NRLP proposes to apply the SSC to all Schedule NBR customers, including non-residential Commercial General and Commercial Demand customers, but its determination of costs and benefits is based on, and specific to, residential rates and the residential rate structure.
- (5) NRLP proposes to levy the charge based on the AC nameplate capacity of the customer's inverter rather than the system design capacity.
- (6) NRLP's proposal to zero out accrued excess generation on January 1 of each year is misaligned with NRLP's SSC calculation, and would limit customers' ability to size their PV systems to fully offset annual on-site energy needs, because it would result in forfeited credits for a typical 100% offset PV system.

Regarding the first standby charge issue raised by witness Barnes - calculation of avoided cost benefits on the volumetric (kWh) residential retail rate,

rather than the unit (kW) costs - NRLP witness Halley stated that his approach was not a mathematical error but rather a difference of opinion with Appalachian Voices. Witness Halley's approach calculated how much of the fixed costs from the cost-of-service study would not be avoided by customers using their solar energy, and then recovered that fixed cost through the standby charge. In rebuttal testimony he stated that:

The NRLP approach is based on a recognition of fixed costs incurred by the utility, recovered in part through volumetric rates, and thus would be under-recovered for customers who reduce usage of NRLP power through solar self-generation. The SSC is designed to recover those fixed costs from the NBR customers who otherwise would avoid them due to their reduced usage of power from NRLP. The goal is to prevent cross subsidies.

Witness Halley testified on cross-examination that:

the way we set up the NBR is we took a look at, our cost of service developed the rates. The rates recover the actual cost of service that NRLP receives to recover those rates. We looked at what was the contribution of that solar -- those solar facilities, actually how does that reduce the billing determinants that the residential customers would be paying to New River, basically, how much energy that reduce in receiving -- that New River would receive from the customers buying the power. We looked at that lost revenue piece as the avoided cost that New River needs to recover from its fixed cost so that's how we utilized the demand component.

. . . .

I accounted for how much it actually reduced the expense that was built into the residential retail rate.

. . . .

Q So to be perfectly clear, it's NRLP's contention that there is absolutely no portion of its distribution infrastructure investments that would ever vary with sales?

A That is correct, based on the rate design we have right now.

Q And no portion of New River's distribution costs would ever vary with sales or usage?

A Correct.

Q But practically speaking, NRLP's distribution system will change over time, will it not?

A I would assume so. They are doing investments in the system itself.

Q It could expand?

A If they add customers, potentially, yes.

Q So there must be some future costs associated with NRLP's distribution system.

A Yeah, but when we're designing rates, we're not looking at future costs. We're looking at the actual costs that were incurred in the test year plus adjustments for known and measurable changes, so that's how the retail rates were designed. So solar is only going to reduce the amount of revenues New River recovers for those fixed costs. So that is where we came up with the charge that we have per kW for the solar installed to make sure those fixed costs are recovered based on the revenues we designed to recover those fixed costs from New River's customers.

This line of questioning from counsel for Appalachian Voices mirrors the testimony of witness Barnes that "[a]II utilities have marginal distribution costs since the distribution grid is not static and new investments are continually being made." He advocated for recognizing future distribution costs that could be avoided given sufficient development of solar generation. The problem with this position, as noted by witness Halley, is that NRLP must recover its present (embedded) fixed costs. A rate design that would offset actual present fixed costs with a theoretical calculation of how much future distribution costs might be avoided is not tenable –

it forces the utility into a present under-recovery on the hope that it will even out in some future day.

Witness Halley testified that his position relates only to the fixed distribution system costs of NRLP. Other demand costs do vary with peak usage, and this is reflected in his calculation of the NBR rate:

we do allow a reduction in the BREMCO demand charge, we do allow a reduction in the DEC transmission charge, and we do allow a reduction in the Carolina Power Partners demand charge based on those percentages at the time that the solar is operating when those CP peaks happen, so they are being compensated fairly for how the costs are incurred for the residential class.

In response to questions from the Commission, witness Halley agreed that with more accurate solar production data and the development of time-of-use rates, it could be reasonable to revisit the standby charge.

The Commission concludes that the NRLP methodology of calculating the standby charge on the basis of volumetric rates rather than unit charge is reasonable for purposes of this proceeding. Distribution system costs are fixed, they are mostly recovered through a volumetric rate, and therefore any reduction in volumetric usage due to solar generation logically supports a charge to recover the fixed cost part of the volumetric rate for usage avoided by solar customers. This applies regardless of the time of day when the solar energy is produced because NRLP rates do not vary by time-of-use. When and if NRLP implements time-of-use rates in the future, it would be appropriate to revisit the calculation of the standby charge.

With regard to witness Barnes' second issue that NRLP used incomplete solar production data to determine the effective solar capacity contribution towards peak demand hours, the Commission concludes that the adjustments made by NRLP are reasonable in the present circumstances. Without complete meter data available, NRLP had to estimate the solar production during times of missing data during the hourly peaks for CPP, DEC and BREMCO.<sup>4</sup> As explained in response to a Commission question, witness Halley testified:

Q. You took the total that you did have and allocated it back through the missing hours?

A. That is correct.

The Commission agrees with witness Barnes that "[t]he amount of missing data and the potential impacts that this missing data could have on the results raise serious questions about its validity." However, the missing data is a fact, and the relevant question is: what is a reasonable method of estimating the missing data for purposes of calculating an appropriate NBR rate? Witness Barnes noted that NRLP "averaged the difference between the last valid data reading before the interruption and first valid reading after the interruption over the intervening hours." He raised the concern that for data interruptions that averaged seven hours in duration, "the accuracy of NRLP's estimation methodology could be exceedingly low as applied to individual hours." At the same time, there is a small possibility

<sup>&</sup>lt;sup>4</sup> This estimation for hourly peaks is separate from NRLP's decision not to adjust the annual renewable energy amount for the missing data. Witness Halley testified in his rebuttal testimony that he did not adjust the amount of energy (as opposed to hourly peaks) used to develop the NBR and PPR rates because that would have increased the standby charge.

that the accuracy of NRLP's estimation could be high. Witness Barnes' concern about which way the estimation "could" be in error is speculative and does not establish it was exceedingly low. The averaging of data from immediately before the interruption and immediately after the interruption is a fair and reasonable estimation method. It does not guarantee accuracy – an impossibility given that data was missing – but the NRLP methodology is reasonable in the circumstances. Witness Barnes' approach of using modeling analysis rather than actual data is an alternative methodology, but the Commission is not persuaded that it produces more accurate results.

The Commission further concludes that NRLP should act to prevent the missing data problem from occurring again before the next rate case. To this end, witness Miller testified that the AMI system was upgraded in February of 2022, allowing more accurate data collection of solar usage, and that the system is now functioning properly. NRLP is also monitoring solar hourly reads to more quickly detect any new occurrence of missing data.

Witness Barnes' third issue, in which he contended that NRLP incorrectly asserted that all its distribution costs are fixed, has been addressed above in connection with the discussion of the first SSC issue about the calculation of solar avoided cost benefits being based on the volumetric residential retail rate, rather than the unit costs for demand-based cost elements. The Commission does not agree with Appalachian Voices that the value of solar exceeds the retail rate charged by NRLP. While the implementation of time-of-use rates in the future may

increase the value of solar for purposes of calculating the NBR rate and its standby charge, the position of Appalachian Voices in the present case would only assure under-recovery of NRLP's actual fixed distribution costs.

With regard to witness Barnes' fourth issue that NRLP applied the standby charge to all customers on the NBR rate, including commercial, when the benefit and cost were calculated only on residential rates, the parties resolved this before the hearing. Witness Halley's rebuttal and settlement exhibits calculated new standby charges for the Commercial and Commercial Demand customers who may choose to be on NBR. Witness Barnes acknowledged this agreement in his summary of testimony.

With regard to witness Barnes' fifth issue that NRLP erred by basing the standby charge on the AC nameplate capacity of the customer's inverter rather than the system design capacity, the Commission notes that witness Halley uses the label "Name Plate" capacity in his Exhibits 19A. Witness Barnes testified that "this charge determinant is mis-aligned with NRLP's methodology for determining the amount of the proposed SSC, which at its core is based on PV system energy production. Energy production is determined by the design capacity of a system, which for customer-sited PV is often lower than the inverter rating . . . ." The Commission questioned witness Halley about this alleged mis-alignment at the hearing, and he agreed that system capacity was appropriate to use, which he determined as the actual maximum output that the solar systems produced:

The intent of the calculations that we did was based on the actual maximum output of the AC to New River's system. So if AC Name Plate Capacity is the wrong terminology to use for that, absolutely. We designed it based on the actual AC output of the system being delivered to New River. So whatever that needs to be called, we are totally open to change the reference to it.

He admitted to not being familiar with the appropriate engineering terminology but clarified that the basis for his calculation was actual production data rather than what the inverters were rated as capable of producing:

Again, the intent was to – the data that we took is the actual data – the actual load that was put from these – actual loads into New River's system. So we are taking -- whatever that needs to be called. I don't know if it's from the inverter amount or it's the Name Plate Capacity amount but we took what was actually delivered to the system at peak times.

The Commission concludes that the actual generation produced at peak as shown by metered data is a reasonable basis for determining the kW capacity of customer systems, whereas inverter nameplate capacity would not have been the best measure. The difference between the parties was the result of mislabeling by NRLP, not a substantive difference.

With regard to witness Barnes' sixth issue where he maintained that there should be no annual reset of solar credits, or if there were to be a reset then the customers should be able to choose when it occurred, NRLP in rebuttal stated it is not taking a position. The Public Staff's position on the resetting of solar credits has already been addressed in connection with the discussion of Schedule NBR above.

#### PPR Rate

Appalachian Voices also opposed the PPR rate. NRLP proposed the PPR Rate as a "Buy All / Sell All" alternative to the NBR rate, open to customers who wish to sell their entire solar output to NRLP from solar facilities that do not exceed 1,000 kW in capacity. Witness Barnes argued that the PPR rate "does not allow customer-generators to consume the energy they generate on-site, could be confusing to prospective DG [Distributed Generation] customers, and relies on a valuation methodology that I have shown to be inaccurate."

As a Buy All / Sell All rate, the PPR would require customers to purchase all the energy they use at their retail rate and sell all their solar energy back to NRLP at the avoided cost rate.

The Commission concludes that the PPR rate is a reasonable addition to NRLP's rate schedules. Any qualifying customer who prefers "to consume the energy they generate on-site" may use the NBR rate instead of the PPR rate. NRLP has given customers a choice. There is no persuasive evidence that providing customers with a choice will confuse them and lead them to a less favorable rate. It is reasonable to expect that solar installers will guide customers to the most favorable rate.

Moreover, the PPR rate provides an opportunity for customers who do not qualify for the NBR rate to sell solar generation back to NRLP. As identified by witness Barnes and witness Miller, such customers could include those with

residential rooftop solar in excess of the 20-kW maximum under the NBR rate, and customers who wish to or have to site their solar PV at some location on their property that is separate from their residence and thus on a separate meter.

Witness Barnes' issue with solar valuation methodology, applicable to the PPR rate as well as the NBR rate, has already been addressed in connection with the discussion of the standby charge.

Initially NRLP indicated the PPR would replace the Small Power (SP) rates approved in Docket No. E-100, Sub 175, for qualifying facilities that have capacity to generate 1 MW or less of renewable energy. However, in rebuttal, witness Halley revised that recommendation to ask that NRLP be authorized to maintain its SP rates as established in Docket No. E-100, Sub 175, for customers who do not meet the eligibility criteria of rates NBR or PPR. This remedies the gap that Appalachian Voices identified for customers who might install renewable energy as a Qualifying Facility under federal law – such as facilities over 1,000 kW in capacity or renewable facilities that are not solar PV generation - and then not have a rate schedule for selling that energy to NRLP. The Commission concludes that it is reasonable to continue the SP rate schedules approved in Docket No. E-100, Sub 175, along with rates NBR and PPR.

# Basic Facilities Charge

NRLP has proposed to increase the residential BFC from \$12.58/month to \$14.50/month. The Public Staff testified that "The proposed BFC represents 40% of the \$36 per month customer-related unit cost-to-serve calculated in the COSS. The Public Staff does not object to the proposed increase because the amount is well below the customer-related cost of service."

Appalachian Voices recommended that the residential BFC be reduced to \$10.61/month based on the "basic customer method" approach to cost of service. Witness Barnes presented multiple different ways to calculate the fixed costs to serve residential customers that were less than the cost-of-service study that was used by NRLP and accepted by the Public Staff. He also noted that where NRLP calculated a fixed residential cost of \$36.00/month, the proposed \$14.50 BFC was arbitrary and not cost-based.

The Commission concludes that the proposed Basic Facilities Charge of \$14.50/month is reasonable and appropriate for this proceeding. There are many ways to conduct a cost of service study and no one methodology is necessarily ideal. Witness Halley described the methodological difference between his recommendation and that of Appalachian Voices:

I used a modified version of the minimum system method, in which I did not assign any rate base costs that would typically be included in the customer component. Utilizing the traditional minimum system approach would have generated a monthly distribution system cost for a residential customer at a level greater than the \$36.00. My

approach is more in line with past North Carolina utility regulation than the approach offered by Mr. Barnes.

Witness Barnes admitted that his basic customer method is not one of the methods in the NARUC Electric Utility Cost Allocation Manual. He admitted that some of the costs he recommended removing from the calculation of the BFC and putting into the kWh volumetric charge were not directly proportional to kWh usage, though he pointed out they were not directly proportional to the number of customers either. He also admitted that the NRLP proposal of \$14.50 is consistent with the statement in the Commission's order in Docket No. E-100, Sub 180, that "The Commission has, to date, accepted Duke's cost-of-service studies and set the basic facilities charge at levels that are less than Duke's cost-of-service studies show are necessary for full recovery of its fixed cost of service." Further, he accepted that Duke Energy has historically used the minimum system method for its cost-of-service studies, and that the Public Staff Report in Docket No. E-100, Sub 162, states that the Public Staff has traditionally supported a BFC based on the minimum system method.

Witness Halley testified that the \$14.50/month residential BFC was designed to be a modest step toward sending the appropriate price signal to match fixed costs with a monthly fixed charge. He noted that the NRLP proposal was close to the residential fixed charges approved for other utilities. The Commission agrees that there is a reasonable basis for the \$14.50/month BFC and that it is not arbitrary. As witness Halley testified, the BFC is used to recover a reasonable

amount of fixed costs. There is little in the way of precedent in North Carolina for establishing a BFC that recovers all fixed costs for a customer class.

Given the historical use of the minimum system method to inform the appropriate level of BFC, and the lack of any one perfect cost of service methodology, the Commission concludes that the approach taken by NRLP for recommending a BFC of \$14.50 is reasonable and should be approved.

# Demand Side Management / Energy Efficiency

Appalachian Voices witness Hoyle recommended that (1) NRLP should formally propose EE/DSM programs for heat pump and water heater rebates, EV charging infrastructure, and programmable thermostats. He recommended that NRLP prepare and file an EE/DSM plan that would include a market evaluation, an evaluation of multiple EE/DSM program options, and a clear timeline with milestones for program development. He further recommended that NRLP develop a behavior-based DSM program to communicate with customers as a means of reducing NRLP load during times of grid stress and during coincident peak hours. Finally, he recommended that NRLP consider adding a program for weatherization and building retrofits/upgrades, particularly for older less-energy efficient residential units.

In rebuttal testimony, witness Miller testified that he did not oppose the development of DSM/EE programs but also emphasized that NRLP, as small utility, does not have the staffing or internal funds to develop DSM/EE programs

on its own. He explained that "NRLP will pursue such programs to the extent funding becomes available and NRLP can obtain support from third parties with experience in addressing building energy efficiency retrofits and in providing low-income assistance."

In particular, he agreed with the recommendation of witness Hoyle that "NRLP should consider adding a program focused on weatherization and building retrofits and upgrades, particularly for older less energy efficient residential units", provided that funding support materialized. Likewise, he agreed that NRLP would formally propose heat pump/water heater, EV charging, and programmable thermostat pilot programs, along with a complementary DSM behavior-based program, only to the extent that grant funding covers the cost for NRLP.

Witness Miller further testified that NRLP is actively seeking grant funding for DSM/EE programs. NRLP has hired a grant writer to work on a joint grant application with the Town of Boone for EV funding; continues to work with the Appalachian State University Energy Center to seek U.S. Department of Energy grants; and has retained the Strategics firm to help with pursuing federal IRA money. In addition, NRLP is working with ElectriCities to obtain collective larger grants.

The Commission concludes that the actions being taken by NRLP with regard to DSM/EE programs are reasonable at this time. Witness Miller referred to his legal counsel's advice that DSM/EE cost recovery mechanisms available to other utilities pursuant to N.C.G.S. §§ 62-133.8 and 62-133.9 are not available to

NRLP. He also noted the potential impact that DSM/EE costs could have on NRLP, as Duke Energy showed just the administrative and implementation costs for a weatherization program were in excess of \$1.6 million, and in excess of \$3.8 million for a Smart Saver program that included heat pump incentives. No party proposed an internal funding source for NRLP to cover DSM/EE costs. The Commission agrees with NRLP that requirements for new DSM/EE programs without an identified funding source would likely have a detrimental economic impact on NRLP. NRLP is seeking grant funding that could include DSM/EE program support, and this approach is a sufficient effort toward DSM/EE programming at this time, given the lack of other cost recovery and funding options for NRLP.

### IT IS, THEREFORE, ORDERED as follows:

- 1. That the Stipulation filed by NRLP and the Public Staff should be, and is hereby, approved in its entirety;
- 2. That NRLP is authorized to adjust its rates and charges and fees to increase its annual gross base revenues by \$4,288,000, with an offsetting decrease in annual PPA revenues resulting in a net revenue increase of \$2,207,074, effective for service rendered on and after October 1, 2023;
- 3. That NRLP shall reduce the UBIT deferral balance to the actual amount paid if the 2023 actual UBIT expense is lower than the estimate amount of

\$364,646, and in the event the actual amount of UBIT is greater than the estimate, the Company shall not seek recovery on the amount over the estimate in the future;

- 4. That NRLP shall place all over-amortization amounts from the UBIT and Campus Substations deferrals into a regulatory liability account to be refunded back to ratepayers with interest at NRLP's weighted average cost of capital over a period to be determined in the NRLP's next general rate case;
- 5. That as soon as reasonably practical, but not later than ten business days from the date of this order, NRLP shall file for Commission approval revised rate schedules and service regulations reflecting the rates and charges and fees designed to produce the increase in revenues as approved herein. The rate schedules shall be accompanied by calculations showing the revenues that will be produced by the rates and charges and fees for each schedule. These calculations shall include a table comparing the revenue produced by the present schedules with the revenue that will be produced under the proposed schedules, and a table showing the rates of return for each customer class as a result of the revenues produced by the proposed rates;
- 6. That as soon as reasonably practical, but not later than ten business days from the date of this order, NRLP and the Public Staff shall jointly prepare and file for Commission review and approval a proposed customer notice, and upon approval of the customer notice by the Commission, shall give appropriate notice of the approved rate increase by either: (1) email delivery for customers who have

provided an email address to NRLP; or (2) postal mail delivery by bill insert in the next billing cycle after the Commission's Order;

7. That the current procedure and method used to determine the annual PPA rider shall continue. The annual PPA rider can be determined without the requirement that NRLP's ongoing earnings be considered as part of each annual rider determination. The base purchased power cost factor reflected in the agreed-to proposed base revenues and established in this proceeding for use in future PPA Rider proceedings is \$0.072769 per kWh (excluding the North Carolina regulatory fee); and

8. That NRLP shall continue to pursue grant funding for development of DSM/EE programs, and to propose new DSM/EE programs as such funding allows.

ISSUED BY ORDER OF THE COMMISSION.

This the \_\_\_ day of September, 2023.

NORTH CAROLINA UTILITIES COMMISSION

A. Shonta Duston, Chief Clerk

## **CERTIFICATE OF SERVICE**

I certify that a copy of the foregoing has been served on all parties of record or their attorneys, or both, in accordance with Commission Rule R1-39, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 21st day of August, 2023.

Electronically submitted /s/Thomas Felling Staff Attorney