

**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)	ORDER ACCEPTING STIPULATION,
Charges Applicable to Electric Service)	GRANTING PARTIAL RATE
)	INCREASE, AND REQUIRING
DOCKET NO. E-34, SUB 55)	PUBLIC NOTICE
)	
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., Courtroom 1, Watauga County Courthouse, 842 West King Street, Boone, North Carolina

Monday, July 10, 2023, at 2:00 p.m., 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 Appalachian State University, d/b/a New River Light & Power Company (NRLP):

M. Gray Styers, Jr., Fox Rothschild LLP, 230 North Elm Street, Suite 1200, Greensboro, North Carolina 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, the Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699

For Appalachian Voices:

Nicholas Jimenez and Munashe Magarira, Southern Environmental Law Center, 601 West Rosemary Street, Suite 220, Chapel Hill, North Carolina 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), NRLP filed notice of its intent to file an application for a general rate case in Docket No. E-34, Sub 54.

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.; 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 an 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 February 1, 2023, the Commission issued an Order Granting Motion to Consolidate Dockets.

On February 1, 2023, the Commission issued an Order Granting Petitions to Intervene of Appalachian Voices in both Docket Nos. E-34, Subs 54 and 55.

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

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

On March 28, 2023, NRLP filed 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 witness Halley on behalf of NRLP. On May 2, 2023, NRLP filed amended and supplemental rate schedules.

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 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 (Intervenor LaPlaca) filed a petition to intervene in Docket No. E-34, Sub 54, which was granted by the Commission on June 1, 2023.

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

On June 6, 2023, Intervenor LaPlaca, who appeared pro se, filed the 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 C. Miller; David Stark, Managing Director of KPMG, Inc. (KPMG); David Jamison, Interim Associate Vice Chancellor for Finance and Administration and University Controller for Appalachian State University (ASU or the University); 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 July 6, 2023, the Commission issued 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 into 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 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 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 and 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, the matter came on for hearing as scheduled 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 Blue Ridge Electric Membership Corporation (BREMCO) Boundary Agreement and Boundary Map as a late-filed exhibit in response to a Commission request.

For the reasons set out in detail in this Order and based upon competent material and substantial evidence in the record, the Commission approves the Stipulation in its entirety.

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

Jurisdiction and Background

1. NRLP is organized as an operating unit of ASU, serving the retail electric power needs of ASU and retail customers in the Town of Boone and its surrounding areas.

2. NRLP had approximately 8,900 metered customers, a peak load of 43.9 megawatts (MW) in 2021, and rate revenues (unadjusted) of \$16,287,187 as of December 31, 2021. Approximately 21.80% of NRLP's load in 2021 was for ASU, with the balance being for residential and commercial customers. NRLP has no industrial customers.

3. NRLP has no generating facilities of its own and purchases almost all of its power supply requirements from Carolina Power Partners (CPP).¹ The power that is purchased wholesale from CPP is delivered across transmission lines of Duke Energy Carolinas, LLC (DEC), and the distribution lines of 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.

4. 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.

5. The appropriate test period for use in this proceeding is the 12-month period ending December 31, 2021, adjusted for certain known changes in expenses and rate base subsequent to the test period.

Quality of Service

6. Several customers testified at the public hearing that NRLP's quality of electric service is good; witnesses for the Public Staff and for NRLP testified as to the good quality and reliability of NRLP's service.

Stipulation

7. NRLP and the Public Staff entered into a Stipulation that was filed on July 6, 2023, and they stated that the Stipulation was the product of give-and-take negotiations between them. Appalachian Voices and Intervenor LaPlaca did not join in

¹ There are also a few rooftop solar customers of NRLP who provide a small amount of electricity to the NRLP system.

the Stipulation; however, they did not present evidence on or otherwise contest many of the matters agreed upon by NRLP and the Public Staff in the Stipulation.

Uncontested Stipulations Relating to Accounting Adjustments

Unrelated Business Income Tax

8. Previously, ASU received tax advice that its utility income was not subject to Unrelated Business Income Tax (UBIT). NRLP appropriately, and in good faith, relied upon that advice. During ASU's annual audit in 2019, KPMG, ASU's auditors, stated that the previous tax advice was incorrect and that ASU should be paying UBIT. Accordingly, ASU incurred additional tax expenses that had not been anticipated in its last rate case. In the Petition for Accounting Order, NRLP requested that the UBIT tax expense, which it has incurred since 2019 in the amount of \$1,028,000, be deferred to a regulatory asset account and recovered in future rates as a cost of service.

9. The Stipulation provides for deferral of the 2023 UBIT estimated amount of \$364,646 over a three-year amortization period, with a reduction in the regulatory account to the actual amount paid if lower than \$364,646. NRLP agrees not to seek recovery on any amounts above \$364,646. Finally, NRLP will place all over amortized amounts in a regulatory liability account, to be returned 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 Intervenor LaPlaca did not oppose this treatment of UBIT.

Substation Costs

10. In December 2020, NRLP began construction of a campus substation upgrade to convert the substation from 44kV to 100kV. The upgrade was necessary to continue receiving transmission service from BREMCO, and the upgraded substation was placed in service in June, 2022. NRLP requested regulatory asset treatment in the amount of \$443,904 for the substation (\$323,378 for the new substation and \$120,526 related to the unamortized balance of the old substation) and requested a three-year amortization of the unrecovered balance of the old substation that had been decommissioned.

11. The Stipulation provides that the amount of depreciation and return for the new substation should be amortized over the useful life of the new substation, and that any over amortization amounts for both substation deferrals should be recorded in a regulatory liability account to be refunded 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 Intervenor LaPlaca did not oppose this treatment of the expenses associated with the campus substation upgrade or the substation deferrals.

Inflation Adjustment

12. The Public Staff and NRLP had differing positions on an appropriate inflation adjustment for expenses that were not otherwise given specific pro forma adjustments. They resolved the dispute by using the rate of actual increase that NRLP experienced in operating expenses during 2022. Appalachian Voices and Intervenor LaPlaca did not oppose this inflation adjustment.

Usage Adjustment

13. The Public Staff proposed a usage adjustment to account for additional revenues caused by anticipated growth in the number of customers. The Public Staff and NRLP agreed in the Stipulation to eliminate this proposed adjustment. Appalachian Voices and Intervenor LaPlaca did not oppose eliminating this adjustment.

Rate Case Expense

14. The Stipulation provides for annual rate case expense of \$140,320. NRLP agreed that it would not seek recovery for any additional amounts, and the Public Staff agreed that there should be no adjustment if rate case expense were to be less than what was agreed to in the Stipulation. Appalachian Voices and Intervenor LaPlaca did not oppose this treatment of rate case expense.

Cost of Capital

15. NRLP is a utility operated by a public university of the State of North Carolina, and therefore it does not have publicly traded stock or investors. Pursuant to state statute, it pays any net profits to the ASU Endowment Fund.

16. NRLP has a lower risk profile than a typical public utility because it has relatively little debt financing and because it is a wholly owned operation of a state-owned institution.

17. NRLP normally uses retained earnings to finance capital improvements. Otherwise, it must follow state requirements for obtaining approval for debt funding, which can be restrictive and time consuming. NRLP considers it important to maintain adequate retained earnings to cover unexpected shortfalls.

18. NRLP's approved cost of capital from its last rate case is 6.525%, which was based on a hypothetical capital structure of 50.00% debt and 50.00% equity, a cost of long-term debt of 3.80%, and a return on equity of 9.25%.

19. According to NRLP's December 31, 2022 financial statements, NRLP's actual capital structure is 26.00% debt and 74.00% equity. No party presented evidence of publicly traded electric utility companies with similar capital structures.

20. The approved equity to debt ratio for electric distribution cases over the period of 2017 through April 30, 2023 is approximately 50.00% equity to 50.00% debt.

21. NRLP's embedded cost of debt is 2.73%, based on a weighted average of NRLP's three outstanding long-term issuances. Income from NRLP's debt instruments is exempt from federal income taxes. NRLP's cost of debt is expected to be higher than that in the near term.

22. In the Stipulation, the Public Staff and NRLP agreed to a 6.165% overall rate of return arrived at by applying a hypothetical capital structure for NRLP consisting of 50.00% debt and 50.00% equity, a cost rate for long-term debt of 3.23%, and a rate of return on common equity of 9.10%. Appalachian Voices objected to the rate of return and capital structure in the Stipulation.

Revenue Requirement and Rate Base

23. In its Application, NRLP sought a revenue increase in its base rates of \$4,624,749, which is an increase of 24.87% over current base rates. However, due to a decrease in the Purchase Power Adjustment Clause (PPAC) of \$2,026,355, NRLP stated that the overall average rate increase would be 13.97%.

24. The Stipulation provides for a total annual electric sales revenue increase of \$4,288,000. Taking into consideration lower purchased power costs, the net increase in the annual revenue requirement is \$2,207,074.

25. Other than the portion of the revenue requirement related to the rate of return and the capital structure to which Appalachian Voices objected, Appalachian Voices and Intervenor LaPlaca did not oppose the stipulated revenue requirement.

26. The Stipulation provides that the appropriate level of original cost of rate base is \$31,441,744. Appalachian Voices and Intervenor LaPlaca did not oppose the stipulated original cost of rate base.

27. Pursuant to the Stipulation, the appropriate level of net operating income for a return is \$1,938,379.

Basic Facilities Charge

28. NRLP's current residential Basic Facilities Charge (BFC) is \$12.58 per month. The Stipulation provides for a BFC of \$14.50 per month for residential service. Appalachian Voices opposes this amount and proposes that the Commission set the BFC at no higher than \$10.61 per month.

Net Billing Rate Rider

29. In its Application, NRLP proposed a net billing rider (NBR or Schedule NBR) as an option for customers who have installed behind-the-meter solar generation. Pursuant to the Stipulation, Schedule NBR will have Standby Supplemental Charges (SSC) of \$5.92 per Kilowatt (kW) per month for residential customers, \$6.39 for Rate Schedule G customers, and \$3.59 for Rate Schedule GL customers. Appalachian Voices and Intervenor LaPlaca maintain that the SSC should be eliminated or reduced.

30. NRLP proposed that NBR customers who generate more energy than they use each month will receive a retail energy rate credit that carries forward for a year, resetting on January 1 of each year. The Stipulation provides that NRLP will reset NBR customer energy credits to zero on January 1 of each year. Appalachian Voices objects to the annual reset of energy credits and contends that the credits should roll over indefinitely.

31. Pursuant to the Stipulation, NRLP has agreed to file an annual report on NBR credits, consumption patterns, revenues, and costs in conjunction with each Purchase Power Agreement (PPA) proceeding.

32. Pursuant to the Stipulation, Schedule NBR will provide that renewable energy credits (certificates) will be retained by the customers.

33. The Stipulation provides for the NBR rate design and resetting process to be reviewed in five years or the next NRLP rate case, whichever is earlier.

Purchased Power for Renewable Energy Facilities Rate

34. NRLP proposed a Purchased Power for Renewable Energy Facilities Rate Schedule (PPR or Schedule PPR) as a “Buy-All-Sell-All” alternative to Schedule NBR, that will be available to customers who wish to sell their entire solar output to NRLP from solar facilities that do not exceed 1,000 kW in capacity.

35. As proposed, Schedule PPR would require customers to purchase all the energy they use from NRLP at their retail rate and sell all their solar energy back to NRLP at the avoided cost rate. Thus, the PPR energy credit would 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.

36. Pursuant to the Stipulation, Schedule PPR will provide that renewable energy credits (certificates) will be retained by the customers.

37. NRLP proposed that the PPR rate design be reviewed during each biennial avoided cost proceeding beginning in 2025.

Small Power Production Rate

38. NRLP proposed to continue offering its Small Power Production (SPP) rates for Qualifying Facilities that have capacity to generate 1 MW or less of renewable energy.

Interruptible Rate Rider

39. NRLP's power supply agreement with CPP provides that its monthly capacity cost is based on NRLP's demand at the time of the CPP customer group peak. NRLP proposed an Interruptible Rate Rider (Schedule IRR) for high load nonresidential customers with the ability to curtail 75% of their load when called to do so. Under Schedule IRR, the customers would receive a monthly credit when they curtail their service at the time of the CPP customer group peak. The Public Staff proposed a clarification that credits should be paid only to participating customers who actually curtail during the coincident peak hour. No party opposed Schedule IRR, as clarified by the Public Staff.

Rate Design and Customer Allocation

40. NRLP had initially proposed to phase in its proposed revenue increase over a two-year period by reassigning some of the proposed first year base rate revenue increase from the Commercial Demand class to the Residential and ASU customer classes. The revised rate design in Halley Rebuttal Exhibit No. 1 eliminates that proposed two-year phase-in.

41. The Stipulation provides that NRLP's revenues from its retail operations for the twelve months ending 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 Class	Present Base Rate Revenue	Proposed Base Rate Revenue	Proposed PPA Revenue Reduction	Proposed Net Revenue Increase	Proposed Net Percentage Increase
Residential	\$6,899,316	\$8,107,101	\$(639,103)	\$568,682	8.2%
Commercial General	\$2,346,323	\$2,947,677	\$(233,511)	\$367,843	15.7%
Commercial Demand	\$5,860,491	\$7,795,868	\$(736,941)	\$1,198,435	20.4%
ASU Campus	\$3,625,006	\$4,092,594	\$(444,922)	\$22,667	0.6%
Security Lighting ²	\$231,057	\$306,953	\$(26,448)	\$49,447	21.4%
Total	\$18,962,193	\$23,250,193	\$(2,080,925)	\$2,207,074	11.6%

² 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.

42. Pursuant to the Stipulation, the base purchased power cost factor reflected in the base revenues for use in future PPA Rider proceedings is \$0.072769 per Kilowatt-hour (kWh) (excluding the North Carolina regulatory fee).

Disconnection Fee

43. NRLP's current reconnection fees are \$25.00 during business hours and \$60.00 outside of business hours. Since NRLP can now accomplish remote connections and disconnections with its Advanced Metering Infrastructure (AMI) technology, the Stipulation provides for a single reconnection fee of \$11.50.

Demand Side Management and Energy Efficiency

44. NRLP agrees to pursue grant funding opportunities for cost-effective demand side management and energy efficiency (DSM/EE) programs.

Next Rate Case Efforts

45. Pursuant to the Stipulation, NRLP and the Public Staff agree to work together prior to NRLP's next general rate case so that the Public Staff can assist NRLP in calculating its revenue requirement.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-5

Jurisdiction and Background

The evidence supporting these findings of fact is contained in the verified Application, the testimony and exhibits presented by the parties, and the entire record in this proceeding. These findings of fact are informational and uncontroversial in nature.

No party has contested the fact that NRLP is subject to the Commission's jurisdiction for the purposes of setting rates. Although not a public utility, NRLP is properly subject to the jurisdiction of the Commission pursuant to N.C.G.S. § 116-35.

The Commission concludes that 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. The Commission concludes that it has personal jurisdiction over NRLP and subject matter jurisdiction over the matters presented in NRLP's Application and Petition for Accounting Order.

EVIDENCE AND CONCLUSION FOR FINDING OF FACT NO. 6

Quality of Service

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 entire record in this proceeding.

At the public hearing on May 23, 2023, David Jackson on behalf of the Boone Area Chamber of Commerce spoke highly of the reliability of NRLP's electric service and the responsiveness of its staff. Tr. vol. 1, 19-21. Similarly, NRLP customer Chris Thaxton spoke of NRLP's work to improve reliability by converting certain overhead lines to underground lines in an area where fallen trees had caused many outages during storms. *Id.* at 23-24. Customers Perry Yates, Jeff Deal, and Amber Mellon testified that they were pleased with the level of service from NRLP. *Id.* at 26-28, 38, 57-58. However, Public Staff witness McLawhorn testified that many NRLP customers had expressed concern about net metering and billing in general and had expressed interest in having more opportunities for customer-owned distributed energy resources directly connected to its distribution system. Tr. vol. 3, 152; tr. vol. 1, 35-38, 42, 50-51. At the public hearing, witness LaPlaca, who was thereafter permitted to intervene in the proceeding based on the facts in this proceeding, expressed considerable concern that NRLP is overly reliant on fossil fuels. Tr. vol. 1, 42-45. No customer testified that the quality of their electric service was poor or inadequate.

Public Staff witness McLawhorn testified: "[o]verall, I conclude that the quality of service provided by NRLP to its customers is good." Tr. vol. 3, 117.

NRLP witness Miller testified that key performance reliability indicators for NRLP are significantly more favorable than other utilities in North Carolina, including the System Average Interruption Duration Index and the System Average Interruption Frequency Index. Tr. vol. 4, 96. He described capital projects that NRLP has completed recently to improve the quality of service, including a new Supervisory Control and Data Acquisition (SCADA) system, undergrounding of lines in areas vulnerable to outages, an improved warehouse and laydown yard, and a new campus substation. Tr. vol. 4, 98.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the electric service provided by NRLP to its customers is adequate and reliable.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7

Stipulation

The evidence supporting this finding of fact is contained in the verified Application, the Stipulation, the testimony and exhibits of all the parties, and the entire record in this proceeding. 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 Intervenor LaPlaca and Appalachian Voices witnesses Hoyle and Barnes. Testimony by NRLP witnesses Halley, Miller, Stark, and Jamison, and Public Staff witnesses McLawhorn, Zhang, and Hinton that was filed prior to the filing of the Stipulation addressed issues that were initially contested between NRLP and the Public Staff and then later resolved in the Stipulation.

Public Staff witness Zhang testified that the Stipulation provides many benefits to ratepayers, and she noted that the most important benefits are a reduction in the \$4,672,000 non-fuel revenue increase requested by NRLP and avoidance of protracted litigation. Tr. vol. 3, 70.

The Commission evaluated the Stipulation, as well as the testimony of NRLP and the Public Staff in support of the Stipulation and their testimony about ratepayer benefits as a result of the Stipulation. The Commission also considered the testimony of witnesses for Appalachian Voices and Intervenor LaPlaca objecting to some provisions of the Stipulation. The Commission concludes that the Stipulation resulted from give-and-take negotiations between the Stipulating Parties and represents compromises that are fair and adequate to each party. The Commission further concludes that the Stipulation provides important benefits to NRLP's customers.

As discussed in the remainder of this Order, the Commission has fully evaluated all provisions of the Stipulation, along with the parties' evidence both supporting and opposing the provisions of the Stipulation. Based upon competent, material, and substantial evidence in the record, the Commission concludes that the Stipulation is just and reasonable to all parties. The Commission, therefore, accepts the Stipulation in full, consistent with the specific discussion and conclusion of each provision herein.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 8-9

Uncontested Stipulations Relating to Accounting Adjustments

Unrelated Business Income Tax

The evidence supporting these findings of fact is contained in the verified Application, the Petition for Accounting Order, the Stipulation, and the testimony and exhibits of NRLP witnesses Halley, Miller, Stark, and Jamison and Public Staff witnesses McLawhorn and Zhang.

In Docket No. E-34, Sub 55, NRLP requested that UBIT expenses incurred since 2019 in the amount of \$1,020,000 be deferred to a regulatory asset and recovered through amortization in rates. NRLP witness Jamison, the Interim Associate Vice Chancellor for Finance and Administration and University Controller for ASU, testified that in 2018 NRLP asked KPMG, its outside tax advisors, for assistance in interpreting and implementing new requirements from the Tax Cuts and Jobs Act. Tr. vol. 4, 334. Previously, ASU had relied on then-accurate advice given to the UNC System that outside

electric service sales were not subject to UBIT. *Id.* After the Tax Cuts and Jobs Act was enacted in 2018, KPMG performed its annual audit and sent a memorandum to NRLP regarding UBIT and tax considerations. *Id.* NRLP then had discussions with KPMG and senior management at ASU and determined that this tax liability was a legal obligation of the university, requiring the filing of amended returns and satisfying the unpaid tax liability, including six years of arrears. *Id.* at 335-36. This outcome was unanticipated. *Id.* at 334. NRLP witness Jamison's testimony was corroborated by NRLP witness Stark, who is a tax advisor with KPMG and was involved with ASU's decision regarding how to address the change in the law relating to UBIT. Tr. vol. 4, 322-26.

The Public Staff opposed the deferral request for UBIT. Public Staff witness Zhang testified that the Public Staff "does not believe the liability was unexpected" because NRLP knew the amount of the tax in 2019 but did not make a request for deferral until 2022. Tr. vol. 3, 63.

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 if 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. If the actual amount of UBIT is greater than the estimate, NRLP will not seek recovery on any amount greater than \$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 Intervenor LaPlaca did not oppose this part of the Stipulation.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the resolution of the UBIT issue in the Stipulation is just and reasonable to all parties in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 10-11

Uncontested Stipulations Relating to Accounting Adjustments

Substation Costs

The evidence supporting these findings of fact is contained in the verified Application, the Petition for Accounting Order, the Stipulation, and the testimony and exhibits of NRLP witnesses Miller and Halley and Public Staff witnesses McLawhorn and Zhang.

In December of 2020, NRLP began construction of a campus substation upgrade in order to convert the substation from 44kV to 100kV. Tr. vol. 4, 98. The upgrade was necessary in order to continue receiving transmission service from BREMCO. *Id.* The

upgraded substation was placed in service in June of 2022. *Id.* at 196. NRLP requested a regulatory asset in the amount of \$443,904 for the substation (\$323,378 for the new substation and \$120,526 related to the unamortized balance of the old substation). Tr. vol. 3, 62.

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. See Petition for Accounting Order, 9. NRLP also requested a three-year amortization of the unrecovered balance of the old campus substation that had been decommissioned. Tr. vol. 4, 203.

The Public Staff reduced the net book value of the old campus substation by updating it to July 31, 2023. Tr. vol. 3, 62. The Public Staff 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 for three years. *Id.* at 62-63.

For settlement purposes, NRLP and the Public Staff agreed to the Public Staff's positions to allow a return for the new substation in-service costs for the period recommended by the Public Staff, amortize the new substation over the 40-year useful life of the asset, and reduce the amount of the old campus substation deferral to include the full depreciation of the old campus substation through July 31, 2023. See Stipulation, 5. Additionally, they agreed that any over amortization amounts for either substation deferral should be recorded in a regulatory liability account which will be refunded to ratepayers with interest at NRLP's weighted average cost of capital over a period to be determined in the next general rate case. *Id.*

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

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the resolution of the campus substation deferral issues in the Stipulation is just and reasonable to all parties in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 12

Uncontested Stipulations Relating to Accounting Adjustments

Inflation Adjustment

The evidence supporting this finding of fact is contained in the verified Application, the Stipulation, and the testimony and exhibits of NRLP witness Halley and Public Staff witness Zhang.

NRLP had originally proposed a 6.60% inflation adjustment for operating expenses that were not otherwise given category-specific pro forma adjustments. NRLP witness Halley testified that the annual Consumer Price Index (CPI) for the twelve months ending September 30, 2022 was 6.60% and applying a monthly factor based on the annual CPI to the unadjusted operating expenses provides an inflation adjustment of \$240,411. Tr. vol. 4, 207. The Public Staff recommended an inflation adjustment of \$68,068 by applying a 3.13% inflation factor, which was based on the average of the CPI rates from December 2021 and December 2022. In rebuttal, NRLP witness Halley observed that the actual increase that NRLP experienced in operating expenses for 2022 was much greater than the CPI. Tr. vol. 4, 206-07.

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 Intervenor LaPlaca did not oppose this part of the Stipulation.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the resolution of the inflation adjustment issue in the Stipulation is just and reasonable to all parties in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 13

Uncontested Stipulations Relating to Accounting Adjustments

Usage Adjustment

The evidence supporting this finding of fact is contained in the verified Application, the Stipulation, and the testimony and exhibits of NRLP witness Halley and Public Staff witness Hinton.

In the Public Staff's direct testimony, the Public Staff made a substantial adjustment for customer growth and usage based on statistical analysis performed by Public Staff witness Hinton. Tr. vol. 4, 47-49. In rebuttal, NRLP 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. *Id.* at 261-62. 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 Intervenor LaPlaca did not oppose this part of the Stipulation.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the resolution of the customer growth and usage issues in

the Stipulation is just and reasonable to all parties in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 14

Uncontested Stipulations Relating to Accounting Adjustments

Rate Case Expense

The evidence supporting this finding of fact is contained in the Stipulation and the testimony and exhibits of Public Staff witnesses McLawhorn and Zhang.

In the present case, the Stipulating Parties have agreed to an annual rate case expense amount of \$140,320. The Stipulating Parties agreed that the total amount of rate case expense is just and reasonable and that NRLP shall not be entitled to seek additional rate case expense, if any, that exceeds the total amount agreed upon by the Stipulating Parties. The Stipulating Parties further agreed that there will not be an adjustment if actual rate case expense were to be less than the rate case amount agreed to in the Stipulation.

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

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the resolution of rate case expense in the Stipulation is just and reasonable to all parties in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 15-22

Cost of Capital

The evidence supporting these findings of fact is contained in the verified Application, the Stipulation, and the testimony and exhibits of NRLP witnesses Halley, Miller, and Jamison, Public Staff witness Hinton, and Appalachian Voices witness Hoyle.

NRLP witness Halley testified in his direct testimony in support of an imputed capital structure of 48.00% debt and 52.00% equity, an imputed long-term debt cost rate of 4.20%, and a 9.60% rate of return on common equity, combining to produce a 7.007% overall return (weighted average cost of capital) for ratemaking purposes. Tr. vol. 4, 218. NRLP witness Halley indicated that the actual capital structure was 21.70% long-term debt and 78.30% equity, with a 2.30% embedded cost of debt. *Id.* at 215. 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. *Id.* at 209. He noted that NRLP's financing depended on retained earnings as well as a modest amount of debt. *Id.* at 210. NRLP witness Halley based his 9.60% rate of return on common equity recommendation on the rates of return on common equity 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. *Id.* at 211. 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. *Id.* at 218. He also compared the national average of rates of return on common equity for regulated electric utilities and actual earned and estimated earned returns for electric utilities as reported by Value Line. *Id.* at 213-14.

NRLP witness Miller testified that for the last two years, NRLP had the lowest residential electric rates in North Carolina on a per kWh basis as reported by the U.S. Energy Information Administration. Tr. vol. 4, 96.

In its direct case, the Public Staff proposed a 50.00% debt and 50.00% equity capital structure, a long-term debt cost rate of 3.23%, and a rate of return on common equity of 8.90%, which combined to produce an overall return of 6.07%. *Id.* at 19.

Public Staff 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. *Id.* 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. Direct Testimony of John R. Hinton, Exhibit 3. The weighted average of the embedded debt cost and the imputed debt cost was 3.23%. Tr. vol. 4, 19.

Public Staff witness Hinton testified that NRLP's requested cost of debt, based on the approved cost of debt of gas distribution utilities, is not reasonable. *Id.* at 32-33. First, ASU has a higher bond rating than those two utilities. Second, the requested cost of debt is not based on NRLP's actual costs. *Id.*

Public Staff witness Hinton developed his rate of return on common equity recommendation by conducting three Discounted Cash Flow (DCF) analyses with a proxy group of electric utilities. *Id.* at 34. He also conducted a Risk Premium analysis based on a regression of allowed rates of return on common equity for distribution-only electric utilities and Moody's index yields for A-rated utility bonds. *Id.* at 40. Public Staff 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. His Risk Premium model generated a predicted estimate for the cost of equity of 9.76%. *Id.* at 42.

Public Staff witness Hinton also noted as a data point that the historic average allowed rate of return on common equity for distribution-only electric utilities is 9.19%, compared to 9.61% for vertically integrated utilities. *Id.* at 41. Public Staff witness Hinton averaged all three of his DCF results and the Risk Premium result to arrive at a recommended rate of return on common equity of 8.90%. Direct Testimony of John R. Hinton, Exhibit 8. He selected a number at the lower end of the range because management of NRLP does not face the same pressures to offer equity investors a rate

of return. Tr. vol. 4, 42. He stated that this cost of capital would be sufficient for NRLP to meet its debt service covenants. *Id.* at 46.

Appalachian Voices witness Hoyle recommended a 5.39% overall return for NRLP. Tr. vol. 2, 58. He testified in favor of using the actual capital structure of 22.00% long-term debt and 78.00% equity, with the long-term debt cost rate of 2.30% presented in the direct testimony of NRLP and a rate of return on common equity of 6.25%. *Id.* at 81.

Appalachian Voices witness Hoyle maintained that NRLP's recommended rate of return on common equity 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 rates of return on common equity were the basis of NRLP's rate of return on common equity recommendation were not, in fact, comparable to the low level of risk for NRLP. Appalachian Voices witness Hoyle recommended a 6.25% rate of return on common equity on the basis of recent municipal bond rates as high as 5.00%, with an added 1.25% for debt service coverage. *Id.*

Appalachian Voices 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.

Id. at 80.

In rebuttal, NRLP 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." Tr. vol. 4, 246. 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. *Id.*

The complications of issuing more debt were highlighted in the rebuttal testimony of NRLP witness Jamison, ASU's Controller. 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." *Id.* at 340. He testified that ASU follows the same principles and targets for debt issued for NRLP operations and that a debt issuance 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. *Id.* at 342. Amounts above that threshold also require approval by the Board

of Trustees and Board of Governors. *Id.* NRLP 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.)

Id. at 343-44.

NRLP witness Jamison 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 — NRLP witness Jamison testified that the utility should maintain a minimum of three to six months of operating cash reserves. *Id.* at 345. 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. *Id.* He opined that a rate of return on common equity 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. *Id.* at 346.

NRLP 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. *Id.* at 347. This statute shows a legislative intent for utility operations to be a source of funding for university endowments. *Id.* It is analogous to an investor-owned utility paying dividends to its shareholders. According to NRLP witness Jamison, this means NRLP should not be treated differently from investor-owned utilities with regard to rate of return on common equity. *Id.* NRLP witness Halley testified in rebuttal that the 8.90% rate of return on common equity and overall return recommendations of the Public Staff were far below recent decisions by the Commission for other utilities. *Id.* at 247. He further noted that the Public Staff's own Hinton Exhibit 1 showed a 9.17% average approved rate of return on common equity for distribution utilities nationally for 2022 and 2023, with an uptick to 9.70% for the one case reported so far in 2023. *Id.* at 248. NRLP witness Halley testified that the Public Staff rate of return on common equity 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. *Id.* at 249-50.

The Public Staff and NRLP settled on a 6.165% overall rate of return in the Stipulation. That return is based on a 50.00% equity and 50.00% long-term debt capital structure, a cost rate of 3.23% for long-term debt, and a rate of return on common equity of 9.10%.

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. Utils. Comm'n v. Carolina Util. Customers Ass'n*, 348 N.C. 452, 466, 500 S.E.2d 693, 707 (1998). 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 common equity, the Commission must evaluate the available evidence, particularly that presented by conflicting expert witnesses. *State ex rel. Utils. Comm'n v. Cooper (Cooper I)*, 366 N.C. 484, 491-93, 739 S.E.2d 541, 546-47 (2013).

The following standards apply when the Commission sets the rate of return for a utility under N.C.G.S. §§ 62-133 and 62-134. As this Commission has previously acknowledged, relying upon the decisions of the United States Supreme Court in *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia (Bluefield)*, 262 U.S. 679 (1923) and *Federal Power Commission v. Hope Natural Gas Co. (Hope)*, 320 U.S. 591 (1944):

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, Application of Duke Energy Carolinas, LLC, for Adjustment of Rates and Charges Applicable to Electric Utility Service in North Carolina, No. E-7, Sub 1146, at 49-50 (N.C.U.C. June 22, 2018); *see also State ex rel. Utils. Comm'n v. Gen. Tel. Co. of the SE (General Telephone)*, 281 N.C. 318, 370, 189 S.E.2d 705, 738 (1972). 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 common 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.

Roger A. Morin, *Utilities' Cost of Capital*, at 19-21 (1st ed.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." Charles F. Phillips, Jr., *The Regulation of Public Utilities*, at 382 (3d ed. 1993).

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. Utils. Comm'n (Public Staff)*, 323 N.C. 481, 490, 374 S.E.2d 361, 369 (1988). 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*, No. E-2, Sub 1023, at 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); see also Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Public Notice, *Application of Duke Energy Progress, LLP for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina and Performance Based Regulation*, No. E-2, Sub 1300, at 155-56 (N.C.U.C. Aug. 18, 2023).

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.

N.C.G.S. § 62-133(b)(4) (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 utility’s customers and the utility’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 utility's ability to access capital on reasonable terms. The Commission sets the rate of return on common 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 utility's ability to attract the capital needed to provide safe and reliable electric service and recover its cost of providing service.

Conclusions on Rate of Return

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

The unusual status of NRLP as a government entity does not mean the utility should be denied an investor-level equity return that other regulated electric utilities in North Carolina receive. The statute that allows NRLP to sell retail electric energy to customers envisions that the utility may and is permitted to have net profits. N.C.G.S. § 116-3. 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 Appalachian Voices witness Hoyle proposes, is not only unsupported by any Commission precedent but would also significantly erode the amount of capital reserves and amount of funds available for capital projects and operational contingencies. A rate of return on common equity more suited to an investor utility, but taking into account the lower risk profile of NRLP, is essential to financial stability for the utility and ultimately will benefit customers.

For its position, NRLP primarily relied on the capital structure and authorized returns for two other distribution utilities. 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 unusual trait of being a business operation within a state agency and does not have shareholders. This characteristic makes comparison to the rates of return on common equity of investor-owned utilities somewhat difficult, at least in the absence of analysis of risk more specific to NRLP.

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 rate of return on common 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 State expects NRLP to

pay its debt obligations through its own revenue stream rather than rely on funding contributions from ASU or the State.

Public Staff 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. Tr. vol. 4, 61. However, Public Staff witness Hinton testified that the operational risks and purchase power risks with NRLP are such that NRLP needs an equity return to generate sufficient funds to be in a financial position to address such risks. Upon cross-examination by Appalachian Voices, Public Staff witness Hinton acknowledged this unique aspect and said he structured his comparable group with relatively low investment risk electric utilities. *Id.* at 60, 75.

At the same time, other characteristics of NRLP implicate risks that are not present with most other electric or distribution utilities. In particular, Public Staff witness McLawhorn noted that NRLP serves a college town with a high proportion of rental housing (about three-quarters of the housing is rental properties). Tr. vol. 3, 170. Additionally, NRLP witness Miller stated that NRLP has no industrial customers and a limited large commercial load in and around a single municipality. Tr. vol. 4, 114. And with only a few substations and interconnection points to BREMCO, NRLP is “isolated” and has less redundancy and flexibility in case of emergencies than larger electric utilities. *Id.* at 97, 345.

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

Public Staff 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. His risk premium model generated a predicted estimate for the cost of equity of 9.76%. He also noted that the average allowed rate of return on common equity for distribution-only providers was 9.19%.

The Commission rejects the recommendation of Appalachian Voices witness Hoyle to base the rate of return on common equity on municipal bond rates. 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.³ If NRLP were to finance its capital needs entirely at the cost rate of bonds, it

³ Appalachian Voices witness Hoyle’s analysis of debt rates also failed to distinguish between general obligation bonds and revenue bonds. Tr. vol. 2, 118-19. There is no evidence in the record of relevant revenue-bond rates as a premise for witness Hoyle’s rate of return on common equity analysis.

would need to compensate for the loss of retained earnings. A utility that seeks financing in capital markets and is at or close to 100.00% debt would have significantly increased risk for lenders compared to a utility with a balanced capital structure. The proposal of Appalachian Voices is contrary to good ratemaking policy and the last Commission docket setting rates for NRLP.

The Commission concludes that the rate of return on common equity of 9.10% in the Stipulation is reasonable and appropriate for use in this proceeding. It is within the range of analytical model results presented by Public Staff witness Hinton. It is nine basis points lower than recent rates of return on common equity 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 rate of return on common equity requested by NRLP in its direct case, NRLP has stipulated to a 9.10% rate of return on common equity in the context of settlement compromises.

The rate of return on common equity and debt cost rate approved in this proceeding should be applied to a capital structure of 50.00% equity and 50.00% debt. That capital structure is supported by the direct testimony of Public Staff 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, including the last rate case for NRLP. As witness Public Staff Hinton states in his testimony, the 50.00% 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 78.00% equity and 22.00% debt is out of keeping with the Commission's practice in setting rates for NRLP and creates a risk that NRLP could not access sufficient capital when needed. The Commission concludes that an imputed 50.00% equity and 50.00% 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 debt cost rate, the Commission concludes that 3.23% is reasonable. That debt cost rate is supported by the direct testimony of Public Staff 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 debt cost rate that NRLP would incur if it were to add debt to achieve a 50.00% 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 Appalachian Voices witness Hoyle is the historical embedded rate obtained from the direct testimony of NRLP witness Halley, which was not as current as the historical cost used by Public Staff witness Hinton since the NRLP direct testimony was filed at an earlier date, and it does not account for the fact

that the evidence in this proceeding is that future debt is expected to be at a cost rate greater than that historical embedded amount.

Public Staff 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.” Tr. vol. 3, 44. 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. *Id.* at 44-45.

Based upon general economic conditions being inherent in the analytical models used by Public Staff witness Hinton, and the historically 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 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.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the resolution of cost of capital in the Stipulation is just and reasonable to all parties in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation. The Commission further concludes that the overall rate of return and the rate of return on common equity provided for in the Stipulation 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.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 23-27

Revenue Requirement and Rate Base

The evidence supporting these findings of fact is contained in the verified Application, the Stipulation, and the testimony and exhibits of NRLP witnesses Halley and Miller and of Public Staff witnesses McLawhorn and Zhang.

In his direct testimony, NRLP witness Halley stated that NRLP requested a revenue increase of \$4,624,749 from its base rates. Tr. vol. 4, 188. 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 and a rate base amount of \$30,964,515. *Id.*

In its prefiled testimony, the Public Staff recommended an increase of \$4,116,670 in overall revenue requirement. Tr. vol. 3, 54. After the filing of the Public Staff's prefiled 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 as set forth in Settlement Exhibit I, Schedules 2 and 3 filed with the settlement testimony of Public Staff witness Zhang. *Id.* at 71 (citing Settlement Exhibit 1). The Stipulation 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.
 - Prepaid expenses of \$83,469.
 - Customer deposits amount of \$(229,105).
 - Cash working capital of \$482,565 for purchased power expense and \$221,360 for other Operations & Maintenance (O&M) expenses.

- NRLP and the Public Staff agreed that the amount of operating revenue deductions 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.
 - UBIT 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 Intervenor LaPlaca did not oppose these amounts that were incorporated by reference into the Stipulation between the Public Staff and NRLP.

Based upon competent, material, and substantial evidence in the record, 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. The Commission, therefore, accepts this part of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 28

Basic Facilities Charge

The evidence supporting this finding of fact is contained in the verified Application, the Stipulation, and the testimony and exhibits of NRLP witness Halley, Public Staff witness McLawhorn, and Appalachian Voices witness Barnes.

The BFC is a mechanism used to recover a reasonable amount of a utility's fixed costs of owning and operating a distribution system. Tr. vol. 4, 255. The BFC is intended to recover a portion of fixed costs that do not vary with the customer's usage. *Id.*

Based upon NRLP's updated cost of service study (COSS), NRLP determined that the residential fixed cost per month is approximately \$36.00, and it proposed to increase the residential BFC from \$12.58 per month to \$14.50 per month. Tr. vol. 2, 204; tr. vol. 4, 229, 255; NRLP Exhibit REH-14. NRLP witness Halley testified that the proposed increase from \$12.58 to \$14.50 is intended to take a "modest step" toward sending the appropriate price signal of matching fixed utility costs with a fixed monthly BFC. *Id.*

NRLP's COSS was performed for the 12 months ending December 31, 2021 to determine the appropriate BFC to allocate to the various customer classes. Tr. vol. 2, 96-97; NRLP Exhibit REH-14. Public Staff witness McLawhorn explained that the purpose of the COSS is to measure and determine the appropriate share of revenues, expenses, and plant related to the provision of electric service that is the responsibility of individual customer classes. Tr. vol. 3, 96. He stated that the COSS is typically developed based on billing determinant data such as number of customers, direct-metered energy sales (kWh), and registered demand (kW). *Id.* However, when direct usage data is not available, load research is utilized. He stated that development of the COSS is the first step in determining the appropriateness of cost-based rates for electric service. *Id.*

Public Staff witness McLawhorn provided further explanation about NRLP's COSS that was filed in this proceeding. *Id.* at 96-97. He stated that in NRLP's previous

proceeding in Docket No. E-34, Sub 46, the Commission ordered NRLP to update all load data in its COSS to incorporate a full year of data collected from its AMI system and to file an updated COSS by the end of June 2019 (Sub 46 Order). *Id.* NRLP filed its updated COSS on June 18, 2019. *Id.* at 96. In the current proceeding, NRLP used the data available from its AMI system to develop the demand and energy related inputs in the COSS, along with other load data, which was used to develop an allocation of costs to the various customer classes, as shown in NRLP Exhibit REH-14. *Id.* at 96-97. Public Staff witness McLawhorn testified that NRLP's COSS filed in this proceeding complies with the Commission's Sub 46 Order. *Id.* at 98.

Appalachian Voices witness Barnes objected to NRLP's proposed residential BFC of \$14.50 per month on a number of bases. Appalachian Voices witness Barnes argued that NRLP's justifications for the proposed increase are that NRLP calculated its fixed costs to serve residential customers to be \$36.00 per month and that the increase is simply closer than the current BFC of \$12.58 to \$36.00. Tr. vol. 2, 204, 229; tr. vol. 4, 255. Appalachian Voices witness Barnes also claims that NRLP used an inappropriate benchmark in its calculated \$36.00 per month residential fixed cost. Tr. vol. 2, 204-05. While Appalachian Voices witness Barnes acknowledges that there are "different schools of thought" on how the amount of such customer-related costs should be determined, Appalachian Voices witness Barnes believes that NRLP inappropriately used the "modified minimum system" approach to determine the cost of service, rather than the more appropriate "basic customer method." *Id.* at 205. He further presented multiple different ways to calculate the fixed costs to serve residential customers that were less than shown in NRLP's COSS and stated that the proposed \$14.50 BFC was arbitrary and not cost-based. *Id.* at 204, 222. Moreover, Appalachian Voices witness Barnes critiqued NRLP's methodology for including costs that are caused by customer demands on the system, rather than costs caused by the number of customers on a system. *Id.* at 204-05. Finally, he expressed concern that NRLP's assessment of the cost to serve residential customers has more than doubled in a period when the number of customers has risen only 10.10%. *Id.* at 220. Therefore, Appalachian Voices witness Barnes recommended that the residential BFC be reduced to no more than \$10.61 per month based on the basic customer method approach to cost of service rather than the modified minimum system approach. *Id.* at 175, 204.

Upon cross-examination, Appalachian Voices witness Barnes admitted that his basic customer method is not one of the methods in the National Association of Regulatory Utility Commissioners (NARUC) Electric Utility Cost Allocation Manual. Tr. vol. 2, 238. He also acknowledged 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, although he pointed out they were not directly proportional to the number of customers either. *Id.* at 242. He further acknowledged that NRLP's proposal of \$14.50 is consistent with the statement in the Commission's order in Docket No. E-100, Sub 180 that "[t]he 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." *Id.* at 253. Further, he accepted that Duke Energy has historically used the

minimum system method for its COSS, 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. *Id.* at 251.

In response to Appalachian Voices witness Barnes' criticisms of NRLP's calculation of a \$36.00 per month residential fixed cost and the proposed residential BFC of \$14.50, Public Staff witness McLawhorn testified that NRLP's production-related capacity costs are recovered pursuant to the terms of the PPA with NRLP's provider, CPP. NRLP pays DEC and BREMCO for power delivery services from CPP to NRLP. Tr. vol. 3, 97-98. NRLP uses class coincident peak data to allocate capacity-related costs associated with the PPA. DEC-related PPA transmission costs are allocated using DEC's transmission peak demand data. BREMCO's power delivery costs are allocated using BREMCO's coincident peak demand data. NRLP's distribution-related costs are allocated using NRLP's distribution peak demand data. Customer-related costs are allocated based on customer data weighted on the kW demands of each class. *Id.* Purchased power costs represent approximately 71% of NRLP's total expenses related to the provision of utility service. The remaining 29% of expenses are related to operating and maintaining the local distribution system, customer accounting, and general administration of the utility. *Id.*

Public Staff witness McLawhorn testified: "The proposed BFC represents 40% of the \$36.00 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." Tr. vol. 3, 110.

NRLP witness Halley described the difference in methodology between his recommendation that the modified minimum system method be used and Appalachian Voices' recommendation that basic customer method be used:

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.

Tr. vol. 4, 256. NRLP witness Halley believes that the modified minimum system method is more appropriate than the basic customer method. *Id.* NRLP witness Halley disagrees with Appalachian Voices witness Barnes' recommendation to lower the BFC to no more than \$10.61 per month. NRLP witness Halley testified that the BFC is designed to recover a reasonable amount of a utility's fixed distribution costs, and lowering the BFC would only shift more fixed costs into the variable energy rate. Tr. vol. 4, 256. NRLP witness Halley testified that NRLP's proposal is close to the residential fixed charges approved for other utilities. Tr. vol. 4, 256.

The Commission places weight on NRLP witness Halley's testimony that the proposed BFC is used to recover from the residential class a reasonable amount of fixed

costs. While the Commission notes that there is little in the way of precedent in North Carolina for establishing a BFC that recovers all fixed costs for a customer class, the Commission agrees with NRLP and the Public Staff that the proposed residential BFC is reasonable and designed to send appropriate price signals to residential customers.

Based upon competent, material, and substantial evidence in the record, and in light of the Commission's 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 NRLP's use of the modified minimum system method to determine the appropriate BFC to allocate to the various customer classes is appropriate. Also based upon competent, material, and substantial evidence in the record, the Commission concludes that the proposed residential BFC of \$14.50 per month is reasonable and not arbitrary and should be approved.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 29-33

Net Billing Rate Rider

The evidence supporting these findings of fact is contained in the verified Application, the Stipulation, and the testimony and exhibits of NRLP witnesses Miller and Halley, Public Staff witness McLawhorn, Appalachian Voices witness Barnes, and Intervenor LaPlaca.

NRLP witness Miller testified that NRLP has proposed a Schedule NBR that is in accordance with the criteria in N.C. Gen. Stat. § 62-126.4. Tr. vol. 4, 100. NRLP's proposed NBR is designed for customers who operate behind-the-meter photovoltaic (PV) generation to allow them to place excess energy back on NRLP's distribution system. *Id.* The rate will be available for customers who operate behind-the-meter 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 nonresidential systems. Customers on the NBR rate will be charged for energy based on the net kWh purchased from or delivered to NRLP, which means that solar energy generated by a customer would directly offset their usage of NRLP energy. In NRLP witnesses' direct testimony and in the Application, NRLP proposed that Schedule NBR include SSC's of \$6.17/kW (AC) per month to recover the costs of distribution facilities required to serve a NBR customer's full load during times when the customer's PV generation is not available. *Id.* at 233-34.

In NRLP's Application, NRLP proposed that 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 for a one-year period and that will be reset to zero on January 1 of each year. Application, Ex. B, 24. 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. Public Staff witness McLawhorn testified that an annual reset of customer credits is intended to reduce intraclass cross-subsidization between NBR participants and non-participants. Tr. vol. 3, 138-39. However, in response to Appalachian Voices' objection to the annual

resetting of the customer's energy credit, on rebuttal, NRLP witness Halley stated that NRLP was willing to remove the annual reset provision as requested by Appalachian Voices but that the Public Staff preferred an annual reset. Tr. vol. 4, 243. Therefore, NRLP witness Halley stated that NRLP is not taking a position about whether Schedule NBR should contain an annual reset provision. *Id.*

In conjunction with NRLP's settlement testimony, NRLP proposed an updated SSC of \$5.92 per kW per month for residential customers, \$6.39 for Rate Schedule G customers, and \$3.59 for Rate Schedule GL customers. Halley Settlement Ex. 1, REH-19A(R) – Settlement, REH-19A(G) – Settlement, and REH-19A(GL) – Settlement. NRLP witness Halley testified that the SSCs were individualized by customer class consistent with the requirement of N.C.G.S. § 62-126.4(b) to avoid cross-subsidies. Tr. vol. 4, 269. The SSCs were developed using a cost of service analysis to determine the cost to serve each customer class. *Id.* at 253. NRLP witness Miller testified that the purpose of the SSC is to recover NRLP's fixed costs from customers whose solar generation lowered their usage from NRLP.

In the Stipulation, NRLP and the Public Staff reached several agreements regarding Schedule NBR that were not contested by Appalachian Voices or Intervenor LaPlaca. First, NRLP agreed to file an annual report on NBR credits, consumption patterns, revenues, and costs in conjunction with each PPA proceeding. Second, the NBR rate schedule will provide that renewable energy credits (certificates) shall be retained by the NBR customers. Third, the design of Schedule NBR, including the energy credit resetting process and the SSC, will be reviewed in five years or the next NRLP rate case, whichever is earlier.

The Commission notes that all parties support a net metering rate but recognizes that Appalachian Voices and Intervenor LaPlaca object to Schedule NBR on specific bases. The Commission further notes that NRLP, the Public Staff, and Appalachian Voices begin their arguments from the premise that NRLP should design its net metering tariff in such a way as to avoid cross-subsidization of NBR participating and nonparticipating customers.

Public Staff witness McLawhorn testified that NRLP's proposed Schedule NBR is a reasonable effort toward compliance with Session Law 2017-192, which is the 2017 legislation that includes N.C.G.S. § 62-126.4. Tr. vol. 3, 102. 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." *Id.*

Regarding opposition to NRLP's proposed Schedule NBR, Appalachian Voices objects to certain elements of Schedule NBR. Appalachian Voices recommends that the Commission approve Schedule NBR but modify it to remove the SSC and eliminate the annual forfeiture of accrued net excess energy credits in order to accurately reflect the costs incurred and benefits provided by customer-sited distribution solar resources.

Likewise, Intervenor LaPlaca opposes NRLP's proposed Schedule NBR. She asserts that the standby charges under Schedule NBR are excessive and a disincentive to renewable energy, and she recommends that the proposed SSC of \$5.92 per kW per month for residential customers be reduced to \$2.00 per kW per month or less. She criticized the SSC as being so high that it would "kill rooftop solar in Boone." Intervenor LaPlaca also objects to the "buy all/sell all" solar rate that NRLP has offered in the past. She also testified generally about climate change consequences from burning fossil fuels to generate electricity.

Standby Supplemental Charges as Part of Schedule Net Billing Rate

Appalachian Voices witness Barnes provided extensive testimony to support his contention that customer-based solar generation provides more value to NRLP than recognized in NRLP's COSS, and that the standby charge should therefore be eliminated from Schedule NBR. Appalachian Voices witness Barnes argues that the standby charge as calculated by NRLP is unreasonable for the following reasons:

1. NRLP's evaluation of the costs and benefits of customer-sited solar is erroneous because NRLP based 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. Tr. vol. 2, 184-87.
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. Tr. vol. 2, 191-93.
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. Tr. vol. 2, 181-83, 189-90.
4. NRLP proposes to apply the SSC to all Schedule NBR customers, including nonresidential 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. *Id.* at 179.
5. NRLP proposes to levy the charge based on the AC nameplate capacity of the customer's inverter rather than the system design capacity. *Id.* at 180.

Appalachian Voices witness Barnes testified that when customer-sited solar generates during coincident peak, it will reduce NRLP's costs under its contract to the extent that it reduces NRLP's demand, just like any other resource that reduced demand at that time. Tr. vol. 3, 135. Accordingly, Appalachian Voices witness Barnes contends that the proper measure of customer-sited solar's value is demand unit costs.

Tr. vol. 2, 184-85; tr. vol. 3, 18-19, 45. According to Appalachian Voices witness Barnes, customer-sited solar is actually worth approximately \$15.97 per kW of load that is reduced during NRLP's monthly coincident peak hour, but NRLP erroneously failed to provide that demand reduction to customer-sited solar. Tr. vol. 2, 186-87.

Regarding the first standby charge issue raised by Appalachian Voices 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. NRLP witness Halley's approach calculated the amount of the fixed costs from the COSS that would not be avoided by customers using their solar energy and then recovered that fixed cost through the SSC. In rebuttal testimony, NRLP witness Halley stated:

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.

Tr. vol. 4, 254.

On cross-examination, NRLP witness Halley further explained that the SSC was properly calculated:

[T]he 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.

Id. at 279-82. NRLP witness Halley's testimony is consistent with Appalachian Voices witness Barnes' testimony that "[a]ll utilities have marginal distribution costs since the distribution grid is not static and new investments are continually being made." However, Appalachian Voices witness Barnes advocated for recognizing future distribution costs that could be avoided given sufficient development of solar generation.

NRLP witness Halley testified that his position relates only to the fixed distribution system costs of NRLP. He testified that other demand costs vary with peak usage, which is reflected in his calculation of the NBR rate:

[W]e 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.

Id. at 287.

In response to questions from the Commission, NRLP witness Halley agreed that with more accurate solar production data and the development of time of use (TOU) rates, it could be reasonable to revisit the standby charge. Tr. vol. 4, 307. As Public Staff witness McLawhorn acknowledged, Appalachian Voices Witness Barnes is “probably technically correct” that valuing customer-sited solar at an average flat volumetric rate does not take into account the cost avoided by solar’s contribution to monthly coincident peak. Tr. vol. 3, 133-34. Public Staff witness McLawhorn proceeded to explain:

[B]ut it's very difficult to base a calculation for a value that only occurs at certain times or certain hours of the day or season or year when, as I said before, we're dealing with average rates and costs that are averaged over a period of time. So, for instance, New River – and I'll just talk about their residential rate for now, is essentially a flat rate. So every kilowatt hour is priced at the same cost, and they have averaged the cost of their system, their distribution costs, their costs that they're charged from BREMCO, their transmission costs that they're charged from Duke Energy to get the power there. And they've taken the total cost and they've averaged that out into a flat rate. So while it is probably true that a kilowatt hour of energy that's produced from a solar PV system may have a different value, depending on when it's produced. It doesn't change the fact that, if the customer, you know, uses that to offset some of its purchases from New River, it is avoiding paying for a portion of the distribution and transmission costs with every kilowatt hour that it offsets. I mean, it's the costs that it's offsetting are not varying, in terms of the rate, itself.

Id.

The Commission concludes that NRLP’s methodology of calculating the standby charge on the basis of volumetric rates rather than unit charge is reasonable for purposes of this proceeding. At this time, NRLP does not have TOU rates that would allow for assessing the contribution of a customer’s PV system to reducing load at peak times. Tr. vol. 4, 307. In his prefiled testimony filed on December 22, 2022, NRLP witness Miller testified that NRLP was “seriously considering” implementing TOU rates, but that developing such rates would require more extensive use of its AMI system than is currently possible. *Id.* at 108. He stated that NRLP “will focus on developing the necessary functionality over the next two years, and after that will be able to propose a time of use rate.” *Id.*

With regard to Appalachian Voices 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.⁴ As explained in response to a Commission question, NRLP witness Halley testified:

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

A: That is correct.

Tr. vol. 4, 312.

The Commission agrees with Appalachian Voices 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.” Tr. vol. 2, 193. However, the missing data is a fact, and the relevant consideration is determining a reasonable method of estimating the missing data for purposes of calculating an appropriate NBR rate. Appalachian Voices 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.” *Id.* 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.” *Id.* At the same time, there is a small possibility that the accuracy of NRLP’s estimation could be high. Appalachian Voices 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. Appalachian Voices 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 readings to more quickly detect any new occurrence of missing data.

The Commission is not persuaded by Appalachian Voices witness Barnes’ third point, in which he contended that NRLP incorrectly asserted that all its distribution costs

⁴ This estimation for hourly peaks is separate from NRLP’s decision not to adjust the annual renewable energy amount for the missing data. NRLP 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.

are fixed. NRLP primarily recovers its distribution costs 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, as NRLP witness Halley explained in response to Commissioner questions. Tr. vol. 4, 313. This applies regardless of the time of day when the solar energy is produced because NRLP rates do not vary by TOU. While the implementation of TOU 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 Appalachian Voices witness Barnes' fourth issue that NRLP proposed to apply the standby charge to all customers on the NBR rate, including commercial customers, when the benefit and cost was calculated only for residential rates, the parties resolved this issue before the hearing. NRLP witness Halley's rebuttal and settlement exhibits calculated new standby charges for the Commercial and Commercial Demand customers who may choose to be on Schedule NBR. Appalachian Voices witness Barnes acknowledged this agreement in his summary of testimony.

Appalachian Voices 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 — was also clarified and resolved during the hearing. The Commission notes that NRLP witness Halley uses the label "Name Plate" capacity in his Exhibits 19A. Appalachian Voices witness Barnes testified:

[T]his 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"

Tr. vol. 2, 180. The Commission questioned witness Halley about this alleged misalignment 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. Tr. vol. 4, 305. 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. *Id.* at 313.

The Commission concludes that NRLP's proposed SSCs, as presented in NRLP witness Halley's rebuttal testimony, are reasonable and appropriate based on the evidence presented.

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.

Annual Reset of Excess Energy Credits

Appalachian Voices witness Barnes also objected to NRLP's proposal to zero out accrued excess generation on January 1 of each year. He testified that this feature misaligned with NRLP's SSC calculation, which is based on an assumption that the customer's generator uses every kilowatt hour that the system generates. Tr. vol. 2, 180. Additionally, he objected that the annual reset would limit customers' ability to size their PV systems to fully offset annual onsite energy needs because it would result in forfeited credits for a typical 100% offset PV system. *Id.*

The Commission is persuaded by Public Staff witness McLawhorn's testimony that periodic resetting of credits is appropriate to avoid cross-subsidization and thus concludes that an annual resetting of customer credits for the NBR rate to occur on January 1 of each year is just and reasonable at this time. In large part, Appalachian Voices witness Barnes's objections to the annual reset appear to result from his disagreement with the way the SSC charge is calculated, which, as stated above, the Commission determines to be reasonable at this time based on the evidence presented. Additionally, Appalachian Voices witness Barnes' critique was based on the understanding that the SSC would be calculated based on the capacity of the customer's PV system. NRLP witness Halley subsequently clarified that it would be based on the actual maximum that the customer put on the system in a one-year period during peak times. Tr. vol. 4, 313. The Commission thus finds that this feature of the design of the SSC mitigates the concern raised by Appalachian Voices.

The Commission finds it noteworthy that NRLP is a small utility, proposing its first net metering rates. Given the size of the system and the fact that NRLP is in the beginning stages of utilizing the benefits of the data provided by its AMI technology, the Commission finds that the design of Schedule NBR is reasonable at this time. The Commission determines that the public policy disfavoring cross-subsidization applies to NRLP: NBR customers should not have their utility rates subsidized by non-NBR customers, and a standby charge helps ensure that NBR customers pay their allocated share of fixed costs.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the provisions of the NBR as provided in the Stipulation are just and reasonable to all parties in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation. The Commission also concludes that an annual resetting of customer credits for the NBR rate to occur on January 1 of each year is just and reasonable at this time. Finally, the Commission directs NRLP to propose TOU rates in its next rate case proceeding or to provide substantial justification as to why it is not able to do so.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 34–37

Purchased Power for Renewable Energy Facilities Rate

The evidence supporting these findings of fact is contained in the verified Application, the Stipulation, the testimony and exhibits of NRLP witnesses Miller and Halley, Public Staff witness McLawhorn, and Appalachian Voices witness Barnes.

NRLP proposed a Schedule PPR 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. Tr. vol. 4, 254-55. As proposed, 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. Thus, the PPR energy credit would 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.

Appalachian Voices witness Barnes argued that the PPR rate “does not allow customer-generators to consume the energy they generate onsite, could be confusing to prospective DG [Distributed Generation] customers, and relies on a valuation methodology that I have shown to be inaccurate.” Tr. vol. 2, 203.

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 Appalachian Voices witness Barnes and witness Miller, such customers could include those with residential rooftop solar in excess of the 20kW 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.

Appalachian Voices 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 SSC.

The Commission concludes that the provisions of the PPR set out in the Stipulation are just and reasonable to all parties in the context of the settlement as a whole and based on competent, material, and substantial evidence in the record.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 38

Small Power Production Rate

The evidence supporting this finding of fact is contained in the rebuttal testimony of NRLP witness Halley.

Initially, NRLP planned that the PPR would replace the SPP 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, NRLP witness Halley revised that recommendation to request that NRLP be authorized to maintain its SPP rates as established in Docket No. E-100, Sub 175 for customers who do not meet the eligibility criteria of rates NBR or PPR. Tr. vol. 4, 255. NRLP's request 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.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that it is reasonable to continue the SPP rate schedules approved in Docket No. E-100, Sub 175.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 39

Interruptible Rate Rider

The evidence supporting this finding of fact is contained in the Application and the testimony and exhibits of NRLP witness Halley and Public Staff witness McLawhorn.

NRLP witness Halley explained that based on NRLP's power supply agreement with CPP, its monthly capacity cost is based on NRLP's demand at the time of the CPP customer group peak. If a customer successfully interrupts service during that period, the customer would not be contributing to NRLP's capacity. Tr. vol. 4, 234-35. Accordingly, NRLP proposed an IRR that would provide a monthly credit for customers that interrupted their service at the time of the CPP customer group peak. The Public Staff proposed a clarification that credits should be paid only to participating customers who actually curtail during the coincident peak hour. Tr. vol. 3, 107-08. No party opposed the IRR, as clarified by the Public Staff.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that it is reasonable and appropriate for NRLP to offer the IRR, for which credits shall be paid only to participating customers that actually curtail usage during the coincident peak hour.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 40-42

Rate Design and Customer Allocation

The evidence supporting these findings of fact is contained in the verified Application, the Stipulation, and the testimony and exhibits of NRLP witness Halley and Public Staff witness McLawhorn.

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. Tr. vol. 3, 115-16. 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 Intervenor LaPlaca did not oppose this part of the Stipulation.

Based upon competent, material, and substantial evidence in the record, 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. The Commission, therefore, accepts this part of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 43

Disconnection Fee

The evidence supporting this finding of fact is contained in the verified Application, the Stipulation, and the testimony and exhibits of Public Staff witness McLawhorn.

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 technology but did not recommend a specific level. Tr. vol. 3, 109. The Stipulation provides 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 Intervenor LaPlaca did not oppose this part of the Stipulation.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the resolution of the reconnection fee in the Stipulation is just and reasonable to all parties and appropriate in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 44

Demand Side Management and Energy Efficiency

The evidence supporting this finding of fact is contained in the testimony and exhibits of NRLP witness Miller and the testimony of Appalachian Voices witness Hoyle.

Appalachian Voices witness Hoyle recommended that NRLP should formally propose DSM/EE programs for heat pump and water heater rebates, EV charging infrastructure, and programmable thermostats. He recommended that NRLP prepare and file an DSM/EE plan that would include a market evaluation, an evaluation of multiple DSM/EE program options, and a clear timeline with milestones for program development. Tr. vol. 2, 58. 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. *Id.* Finally, he recommended that NRLP consider adding a program for weatherization and building retrofits/upgrades, particularly for older, less energy-efficient residential units. *Id.* at 59.

In rebuttal testimony, NRLP witness Miller testified that he did not oppose the development of DSM/EE programs but also emphasized that NRLP, as a small utility, does not have the staffing or internal funds to develop DSM/EE programs on its own. Tr. vol. 4, 110. 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.” *Id.* at 112.

In particular, NRLP witness Miller agreed with the recommendation of Appalachian Voices 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. *Id.* at 106-07. 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. *Id.* at 107-08.

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 ASU Energy Center to seek U.S. Department of Energy grants; and has retained the Strategics firm to help with pursuing federal IRA money. Tr. vol. 4, 161. In addition, NRLP is working with Electricities to obtain collectively larger grants. *Id.*

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the actions being taken by NRLP with regard to DSM/EE programs are reasonable at this time. NRLP 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. Tr. vol. 4, 110. 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. *Id.* 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.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that it is appropriate for NRLP to continue to make reasonable efforts to obtain 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.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 45

Next Rate Case Efforts

The evidence supporting this finding of fact is found in records of this case and 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.

Stipulation at 6.

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. Such communication and cooperation will serve the public interest by conserving resources of the Public Staff, NRLP, and the Commission, all of which are institutions of the State of North Carolina.

Based upon competent, material, and substantial evidence in the record, the Commission concludes that the resolution of the pre-rate case efforts in the Stipulation is just and reasonable to all parties in the context of the settlement as a whole. The Commission, therefore, accepts this part of the Stipulation.

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 NRLP 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 10 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 in its next rate case proceeding NRLP shall propose TOU rates to be offered to customers as an option or provide substantial justification as to why it is not able to do so;
7. That as soon as reasonably practical, but not later than 10 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;
8. 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

9. 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 16th day of October, 2023.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in cursive script that reads "Tamika D. Conyers".

Tamika D. Conyers, Deputy Clerk

Chair Charlotte A. Mitchell did not participate in this decision.

Commissioner Daniel G. Clodfelter concurs in full.

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

Commissioner Daniel G. Clodfelter, concurring in full:

I concur in the Commission's decision, and I also join in its opinion with respect to all matters except Finding of Fact Number 28 (Basic Facilities Charge). As to that finding, I concur in the result only but not in the Commission's analysis. Consistent with my views expressed in several other electric public utility general rate cases, I do not believe the so-called "minimum system" method for classifying a portion of distribution system costs as "customer-related," and therefore allocating them among the utility's customer rate classes on the basis of the numbers of customers in each class, is conceptually sound or in accord with cost causation principles. Nor do I believe the resulting classification and allocation serves as an appropriate guidepost for determining, albeit indirectly, the portion of costs to be recovered from the residential rate class on a fixed charge basis as opposed to recovery through usage or volumetric charges. I will not restate here the reasons for my position. See Order Accepting Stipulation, Deciding Contested Issues and Granting Partial Rate Increase, *Application by Duke Energy Progress, LLC, for Accounting Order to Defer Incremental Storm Damage Expenses*, No. E-2, Sub 1131 (N.C.U.C. Feb. 23, 2018) (Clodfelter, Comm'r, dissenting in part); Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction, *Application of Duke Energy Carolinas, LLC, for Adjustment of Rates and Charges Applicable to Electric Utility Service in North Carolina*, No. E-7, Sub 1146 (N.C.U.C. Jun. 22, 2018) (Clodfelter, Comm'r, dissenting in part).

Notwithstanding my opposition to the use of the "minimum system" methodology, however, I concur in the result reached by the Commission as to the level of the monthly fixed charge appropriate for use by the utility based on the facts presented in this rate proceeding. Two facts peculiar to the NRLP's system are I believe pertinent. NRLP's customer base skews overwhelmingly residential, which helps to minimize the inter-class cost allocation distortions otherwise associated with use of the "minimum system" methodology. Stated another way, because NRLP's nonresidential customer base is relatively small, little in the way of demand-related distribution system costs are being shifted onto the residential rate class due to use of the "minimum system" methodology. Second, and equally importantly, NRLP's service territory is small relative to many other electric utilities that operate in the state, is geographically compact, and exhibits relatively uniform customer density, all those being factors that again mitigate cost allocation distortions associated with the "minimum system" methodology. Because NRLP is proposing to establish a fixed monthly charge that is considerably lower than what the results of its COSS might otherwise appear to indicate, I consider it unlikely on this record that use of the "minimum system" methodology has any substantial effect on the result. As does the Commission, I find the proposed monthly fixed charge of \$14.50 per customer not unreasonable on the record as presented.

/s/ Daniel G. Clodfelter
Commissioner Daniel G. Clodfelter