

INFORMATION SHEET

PRESIDING: Chair Mitchell, and Commissioners Brown-Bland, Clodfelter, Duffley, Hughes,
McKissick, and Kemeraït

PLACE: Dobbs Building, Raleigh, NC

DATE: Wednesday, September 28, 2022

TIME: 9:00 a.m. – 12:32 p.m.

DOCKET NO(s): E-100, Sub 179

COMPANY: Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC

DESCRIPTION: 2022 Biennial Integrated Resource Plans and Carbon Plan

VOLUME NUMBER: 28

APPEARANCES

See Attached

WITNESSES

See Attached

EXHIBITS

See Attached

CONFIDENTIAL COPIES OF TRANSCRIPTS AND EXHIBITS ORDERED BY:

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4 TIME IN SESSION: 9:00 A.M. TO 12:32 P.M.
5 BEFORE: Chair Charlotte A. Mitchell, Presiding
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7 Commissioner Daniel G. Clodfelter
8 Commissioner Kimberly W. Duffley
9 Commissioner Jeffrey A. Hughes
10 Commissioner Floyd B. McKissick, Jr.
11 Commissioner Karen M. Kemerait

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IN THE MATTER OF:

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Duke Energy Progress, LLC, and

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Duke Energy Carolinas, LLC,

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2022 Biennial Integrated Resource Plans

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and Carbon Plan

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VOLUME 28

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BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NOS. 2019-224-E and 2019-225-E - ORDER NO. 2022-643

SEPTEMBER 21, 2022

IN RE: Docket No. 2019-224-E – South)	ORDER DENYING PETITIONS
Carolina Energy Freedom Act (House)	FOR REHEARING AND/OR
Bill 3659) Proceeding Related to S.C.)	RECONSIDERATION OF
Code Ann. Section 58-37-40 and)	ORDER NO. 2022-332
Integrated Resource Plans for Duke)	
Energy Carolinas, LLC)	
)	
and)	
)	
Docket No. 2019-225-E – South)	
Carolina Energy Freedom Act (House)	
Bill 3659) Proceeding Related to S.C.)	
Code Ann. Section 58-37-40 and)	
Integrated Resource Plans for Duke)	
Energy Progress, LLC)	

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (“Commission”) on three separate Petitions from parties to the proceedings in Docket Nos. 2019-224-E and 2019-225-E. Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (together, “Duke”) filed a Joint Petition for Rehearing and/or Reconsideration of Order No. 2022-332. Vote Solar separately filed a Petition for Rehearing and/or Reconsideration of Order No. 2022-332. Carolinas Clean Energy Business Association, Southern Alliance for Clean Energy, SC Coastal Conservation League, Upstate Forever, Sierra Club, and Natural Resources Defense Council (together, “Joint Petitioners”) filed a

Petition for Reconsideration of Order No. 2022-332. The Petitions were all filed pursuant to S.C. Code Ann. sections 1-23-380, 58-27-2150, and S.C. Code Ann. Regs. 103-825(A)(4) and applicable South Carolina and federal law. The Petitions for Rehearing and Reconsideration filed by Duke, Vote Solar, and the Joint Petitioners are denied.

II. APPLICABLE LAW REGARDING PETITIONS FOR RECONSIDERATION

Section 58-27-2150 provides for rehearing as follows:

After an order or decision has been made by the Commission any party to the proceedings may within ten days after service of notice of the entry of the order or decision apply for a rehearing in respect to any matter determined in such proceedings and specified in the application for rehearing, and the Commission may, in case it appears to be proper, grant and hold such rehearing. The Commission shall either grant or refuse an application for rehearing within twenty days, and a failure by the Commission to act upon such application within that period shall be deemed a refusal thereof. If the application be granted the Commission's order shall be deemed vacated, and the Commission shall enter a new order after the rehearing has been concluded.

S.C. Code Ann. § 58-27-2150 (2015).

"The purpose of a petition for rehearing [or reconsideration] is not to have presented points which lawyers for the losing parties have overlooked or misapprehended, and the purpose of a petition for rehearing [or reconsideration] is not just to have the case tried ... a second time." *Arnold v. Carolina Power & Light Co.*, 168 S.C. 163, 167 S.E. 234, 238 (1933); see also, *Kennedy v. S.C. Retirement Sys.*, 349 S.C. 531, 532, 564 S.E.2d 322, 322 (2001). Further, "[t]he purpose of a Petition for Rehearing is not intended as a procedure for rearguing ... [a] case merely because the non-prevailing parties disagree with the original decision." *In re BellSouth BSE, Inc.*, Docket No. 97-361-C, Order No. 98-66 at 1-

2. Rather, petitions for rehearing or reconsideration are to allow the Commission to identify and correct specific errors and omissions in its orders. Nor can a party raise issues in a motion to reconsider that could have been presented prior to the decision on the merits or that are raised for the first time in a petition for rehearing. See *Kiawah Prop. Owners Group v. Pub. Serv. Comm'n*, 359 S.C. 105, 113, 597 S.E.2d 145, 149 (2004); *Hickman v. Hickman*, 301 S.C. 455, 456, 392 S.E. 2d 481, 482 (Ct. App. 1990); *Patterson v. Reid*, 318 S.C. 183, 185, 456 S.E.2d 436, 437 (Ct. App. 1995); *McGee v. Bruce Hosp. Sys.*, 321 S.C. 340, 468 S.E.2d 633 (1996).

Based upon the law and arguments of the parties related to the petitions filed by Duke, Vote Solar, and the Joint Petitioners, the Commission denies the requests for reconsideration and/or rehearing in this matter as set forth below. The Commission's Order demonstrates that the evidence presented was evaluated and that the Commission based its decision upon the evidence and applicable law. Additionally, the analysis and discussion of the evidence and application of the law as set forth in Order No. 2022-332 is incorporated herein as a further rationale and support of the Commission's decision being fully based upon the evidence of record whereby the Petition for Reconsideration and/or Rehearing filed by Duke, Vote Solar, and the Joint Petitioners are denied.

III. SUMMARY OF PETITIONS

A. Duke's Joint Petition for Rehearing and/or Reconsideration

On May 13, 2022, Duke filed a Joint Petition for Rehearing and/or Reconsideration ("Duke's Petition") requesting that the Commission reconsider its decision to select

Portfolio A2 and instead affirm Duke's selection of Portfolio C1. Duke Petition for Rehearing and/or Reconsideration at p. 2. Duke specifically alleges

(i) the Commission's Order contains no reasoning to support its *sua sponte* selection of Portfolio A2; (ii) the Commission's decision unreasonably conflicts with the Commission's own directives in Order No. 2021-447; (iii) the Commission's decision unreasonably conflicts with the Commission's decisions in the Dominion Energy South Carolina, Inc. ("Dominion") Integrated Resource Plan ("IRP") proceeding; (iv) utilities and stakeholders need clear and consistent direction from regulators in resource planning in order to mitigate risk and maximize value for customers and the state; (v) the Commission's policy decision to override the Companies' selection of Portfolio C1 and instead select Portfolio A2 carries undue risk; and (vi) the Commission's selection of Portfolio A2 conflicts with the efficiencies of dual-state resource planning.

Id. at pp. 2-3.

B. Vote Solar's Petition for Rehearing and/or Reconsideration

On May 15, 2022, Vote Solar filed a Petition for Rehearing and/or Reconsideration ("Vote Solar's Petition") which alleges that 1) "the Commission erred in approving the Modified IRP given that [Order No. 2021-447] holds it cannot be the most reasonable and prudent means to meet the utilities' energy and capacity needs." Vote Solar Petition at p. 12:2) "the Commission erred by making no finding that any resource plan or portfolio is the most reasonable and prudent means to meet the utilities' energy and capacity needs." Vote Solar Petition at p. 15; and 3) "the Commission erred in approving the Modified IRP and mandating new Portfolio 'A2' because that holding cannot be based on sufficient evidence, while Duke Energy remained noncompliant with [Order No. 2021-447] and otherwise." Vote Solar Petition at p. 18.

C. Joint Petitioner's Petition for Reconsideration

On May 16, 2022, the Joint Petitioners filed a petition which requests reconsideration of Order No. 2022-332 (Joint Petition). The Joint Petitioners allege Order No. 2022-332:

“specifically mandates” that Duke “use Portfolio A2 as the selected base plan for the Companies’ respective Modified IRPs” despite the lack of any rationale or record support for that determination. Further, the Order fails to meet the requirements of S.C. Code Ann. §58-37-40(C)(2), which directs the Commission to approve a utility’s IRP only if it finds that “the proposed integrated resource plan represents *the most reasonable and prudent* means of meeting the electrical utility’s energy and capacity needs as of the time the plan is reviewed.”

Joint Petition at pp. 2-3.

IV. DISCUSSION

All Petitions – filed individually by Duke, Vote Solar, and the Joint Petitioners - sought rehearing and/or reconsideration of the Commission’s decision in Order No. 2022-332 which “specifically mandates the Duke Companies to use Portfolio A2 as the selected base plan for the Companies’ respective Modified 2020 IRPs.” Order No. 2022-332 at p. 1. Further, the petitions of both Vote Solar and the Joint Petitioners argue that the Commission erred by not specifically finding “the proposed integrated resource plan represents the most reasonable and prudent means of meeting the electrical utility’s energy and capacity needs.” S.C. Code Ann. § 58-37-40(C)(2).

It is necessary to clarify the nature of the portfolio selection before the Commission and the significance of Portfolio A2 to properly understand (1) the evidentiary record before the Commission regarding the Modified IRPs; (2) the significance of the A2

Portfolio and clarification of adoption of the same; and (3) prospective changes in expectation of Integrated Resource Plan designation of specific portfolios.

A. Evidentiary Record in the Duke IRP Process

In the initial joint proceeding in Docket Nos. 2019-224-E and 2019-225-E, the parties presented extensive testimony and exhibits resulting in a transcript exceeding 2,300 pages. During the proceeding, parties representing various interests appeared, presented comprehensive testimony, and conducted significant cross examination. The Commission was also able to question witnesses and resolve ambiguities. Unlike the comprehensive process that was utilized in the initial IRP joint proceeding, implementation of S.C. Code Ann. Section 58-37-40(C)(3) resulted in a different – and more limited – process upon Commission rejection or modification to the utilities' IRPs.

If the commission modifies or rejects an electrical utility's integrated resource plan, the electrical utility, within sixty days after the date of the final order, shall submit a revised plan addressing concerns identified by the commission and incorporating commission-mandated revisions to the integrated resource plan to the commission for approval. Within sixty days of the electrical utility's revised filing, the Office of Regulatory Staff shall review the electrical utility's revised plan and submit a report to the commission assessing the sufficiency of the revised filing. Other parties to the integrated resource plan proceeding also may submit comments. No later than sixty days after the Office of Regulatory Staff report is filed with the commission, the commission at its discretion may determine whether to accept the revised integrated resource plan or to mandate further remedies that the commission deems appropriate.

S.C. Code Ann. § 58-37-40(C)(3).

Consistent with the statute, the Commission ordered modifications to the IRPs of the Duke Companies.

B. Significance of the A2 Portfolio and Adoption

Among other things, the Commission ordered Duke to make several modeling changes including certain natural gas and battery cost assumptions. Regarding natural gas cost, Duke was specifically ordered “[i]n its Modified IRP, IRP Update, and future full IRPs, Duke shall remodel its portfolios using natural gas pricing forecasts that rely on market prices for eighteen months before transitioning over eighteen months to the average of at least two fundamentals-based forecasts, as recommended by CCEBA Witness Lucas.” Order No. 2021-447, p. 88. Regarding battery cost, Duke was specifically ordered, “In its Modified IRP and future IRPs, Duke shall use the NREL ATB Low figures for battery storage costs.” Order No. 2021-447, p. 88.

In its Modified IRP, Duke complied with these two ordered provisions by modeling additional, supplemental cases. Specifically, the Modified IRP included a 1-series (e.g. A1, B1, C1, etc.) and a 2-series (e.g. A2, B2, C2, etc.) of modeled scenarios, with the 1-series maintaining the original modeled assumptions and the 2-series reflecting the Commission-required input assumptions.

In its Modified IRP, Duke designated Portfolio C1 as its Preferred Portfolio. This portfolio fails to incorporate the Commission-required input assumptions as dictated by Order No. 2021-447 and reflects an aggressive carbon management strategy that is unsupported by South Carolina law. In fact, the Base Case A1 Portfolio was projected to have a present value revenue requirement of \$43.5 billion as opposed to the C1 Portfolio which was projected to have a present value revenue requirement of \$46.9 billion. Duke Modified IRP (Corrected) p. 10 of 116. The C1 Portfolio requires significant and

unsupported deviations from the least cost planning principles that are reflected in the Base Case (A1 or, pursuant to Order No. 2021-447, A2). By contrast, in its original IRP, Duke did not specifically indicate a preferred portfolio plan but did indicate that its Base Case (Portfolio A1) would incorporate least cost planning to meet its projected energy needs.

As Duke Witness Snider testified:

The portfolios presented in the IRPs fulfill the requirements of Act 62 and present a total plan that can adapt to changing standards, technology, and policies. The base scenario is designed to meet traditional least cost standards and appropriately recognizes the legal and regulatory obligations that exist today while the IRPs also evaluate other pathways that help the companies plan for and inform future technological developments and regulatory and policy's evolutions.

Tr. Vol 1. 60:18-61:3.

The Commission, relying on the entire record – including testimonial assertions made by Duke in its initial IRP hearing – adopted the A2 Portfolio. The A2 Portfolio, which incorporates least cost planning and reflects the Commission-required input assumptions, is consistent with and pursuant to Order No. 2021-447. Duke provided both its originally modeled portfolios and supplemental portfolios that were prepared pursuant to Commission Order No. 2021-447. The entire series of original portfolios (the 1-series), of which Duke's Preferred Portfolio (C1) is a part, are inconsistent with Commission Order No. 2021-447. While provision of additional, non-compliant modeling scenarios is permissible, such non-compliant scenarios are not viable as a singular Preferred Plan.

The Commission's decision directing Duke to adopt A2 as the Preferred Plan, which reflects – among other things – adoption of the least cost planning principles and Commission-required modeling input assumptions, represents the most reasonable and

prudent means of meeting the electrical utility's energy and capacity needs as of the time the plan is reviewed pursuant to S.C. Code Ann. section 58-37-40(C)(2).

V. FINDINGS OF FACT

A. Duke Companies' Petition

1. The Commission's Order No. 2022-332, as further explained in this Order, contains adequate reasoning and support for the selection of Portfolio A2.

2. The Commission's decision is consistent with its directives in Order No. 2021-447.

3. The comparison between the IRP process used by Dominion Energy South Carolina, Inc. and the Duke Companies is inappropriate. Each utility-specific IRP proceeding necessarily includes issues specific to the respective proceeding.

4. The utilities and stakeholders are given clear and consistent direction of the regulators regarding resource planning. The utilities, being expected to implement the best practices in an ever-evolving situation are not bound by a specific resource plan – since by the very nature, those plans may change as more information becomes available.

5. The Commission decision to not adopt Portfolio C1 carries no risk to the South Carolina ratepayer base.

6. The Commission decision to adopt A2 does not interfere with efficiencies of dual-state planning. It is incumbent upon the utilities to recognize that North Carolina and South Carolina have different statutory structures which, at times, align. In other instances, however, due to specific regulatory requirements unique to a single state, dual-state planning must accommodate those differences.

B. Vote Solar Petition

7. The previous Order No. 2022-332 did not find that the Modified IRP – nor the selected Portfolio A2 – cannot be the most reasonable and prudent means to meet the utilities’ energy and capacity needs.

8. The Commission did not err in approving the Modified IRP, because the Modified IRP satisfied the requirements of Commission orders. Though Duke did include planning portfolios that were not compliant with Commission orders (the 1-series), the additionally modeled portfolios (the 2-series) were prepared in compliance with the Commissioner’s directions and presented for Commission consideration.

9. The Commission, through adoption of Portfolio A2, necessarily found that Portfolio A2 is the most reasonable and prudent means to meet the utilities’ energy and capacity needs.

C. Joint Petitioners’ Petition

10. The Commission’s adoption of Portfolio A2 was based on the rationale and record referenced in this Order. Necessarily, the Commission finds “the proposed integrated resource plan represents the most reasonable and prudent means of meeting the electrical utility’s energy and capacity needs as of the time the plan is reviewed.”

VI. CONCLUSIONS OF LAW

1. The Commission has not erred as a matter of law with regard to adoption of Portfolio A2. As a matter of evidentiary record, there is persuasive and credible evidence demonstrating that Portfolio A2 represents the Base Case, least-cost planning while reflecting the Commission-required inputs to modeling.

2. The Commission has not erred as a matter of law with regard to a finding that “the proposed integrated resource plan represents the most reasonable and prudent means of meeting the electrical utility’s energy and capacity needs as of the time the plan is reviewed.” Adoption of Portfolio A2 necessitates a finding by the Commission that it constitutes “the most reasonable and prudent means of meeting the electrical utility’s energy and capacity needs.” In the event that such finding was not clear, this order has clarified such finding was necessarily implicated by the Commission’s decision, thus curing any perceived deficiency.

VII. ORDERING PROVISIONS

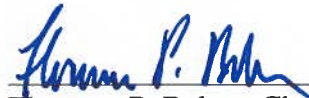
IT IS THEREFORE ORDERED:

1. The Petitions for Reconsideration and/or Rehearing are denied.
2. The Commission clarifies that it found, as necessarily included consideration in the adoption of Portfolio A2, “the proposed integrated resource plan represents the most reasonable and prudent means of meeting the electrical utility’s energy and capacity needs as of the time the plan is reviewed.”
3. Dual-state planning efficiencies, while a consideration, do not obviate the need for an IRP to comply with applicable IRP principles in the context of existing South Carolina statutes and regulations.

4. This order shall remain in force and effect until further action of the Commission.

BY ORDER OF THE COMMISSION:





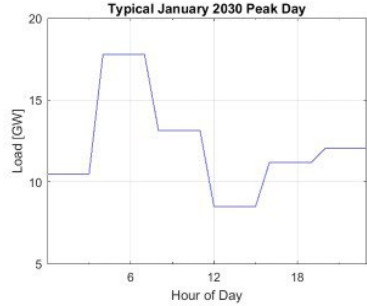
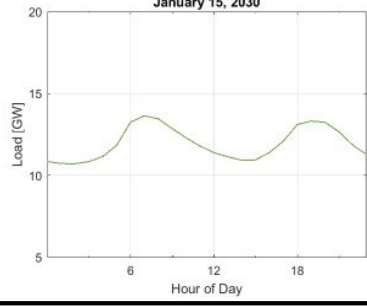
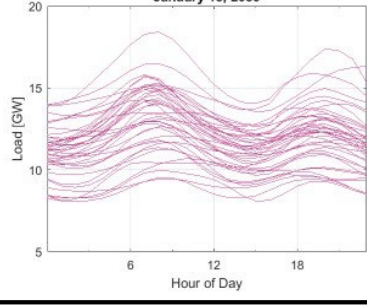
Florence P. Belser, Chair
Public Service Commission of
South Carolina

Rebuttal Table 1: Summary of the Companies' Proposed Near-term Actions with Intervenor's Suggested Modifications

	Solar (including SPS)	BESS Paired w/ Solar	BESS Standalone	Onshore Wind	CT	CC
Supporting deployment by: ¹	YE 2028	YE 2028	YE 2029	YE 2029	YE 2029	YE 2029
Duke Energy Proposal (MW)	3,100	600	1,000	600	800	1,200
Public Staff Proposal (MW)²	2,630	820	1,130	600	800	1,200
Alternative Proposals (MW)						
AGO ³	3,100	600	1,000	600	0	0
Tech Customers ⁴	3,450	1,600	2,900	1,200	400	0
CPSA ⁵	4,800	1,650	0	600	0 to 500	1,200
NCSEA et al. ⁶	4,000	0	4,000	600	0	0
Differences from Duke Energy Proposal						
Public Staff Proposal (MW)	-470	+220	+130	0	0	0
Alternative Proposals (MW)						
AGO	0	0	0	0	-800	-1,200
Tech Customers	+350	+1,000	+1,900	+600	-400	-1,200
CPSA	+1,700	+1,050	-1,000	0	-800 to -300	0
NCSEA et al.	+900	-600	+3,000	0	-800	-1,200
<p>Note 1: Year End dates are selected based on the expected timeline from commencing development/procurement to project in service.</p> <p>Note 2: Public Staff recommends including 440 MW of remaining CPRE capacity in the 2022 Carbon Plan solar procurement. CPRE amounts are excluded from the numbers in this table.</p> <p>Note 3: Supports the Companies' proposed solar, storage, and onshore wind volumes as a "no regrets" floor for procurement. See AGO Burgess Direct Testimony at 69.</p> <p>Note 4: Does not make a specific Near-Term Actions Proposal. Values used are based on Tech Customers' "Preferred" portfolio. See Tech Customers Roumpani Direct Testimony at 5.</p>						

Note 5: CPSA does not clearly advocate for specific volumes of resources for the near-term action plan other than solar and SPS. The volumes for other resources included in Rebuttal Table 1 reflect Portfolios CPSA3 and CPSA5, which “CPSA strongly recommends. . . inform Duke's near-term execution plan.” *See* CPSA Norris Direct Testimony at 29. CPSA3 and CPSA5 both include two new CCs by 2030 totaling 2,400 MW, only one of which is reflected here, consistent with the Companies’ approach to developing their own near-term action proposal. **Note 6:** NCSEA et al. recommend beginning procurement of 4,000 MW each of solar and storage with target in-service dates of 2025-2028. Not shown above is additional recommendation for 2,500 MW of off-system onshore wind. NCSEA et. al Fitch Direct Testimony at 50-51.

Rebuttal Figure 5: Scope and Purpose of the Models Used in the Carbon Plan Analysis

Model	Purpose	Scope	DEC Sample Load Profile
Capacity Expansion (EnCompass)	Initial screening of thousands of possible portfolios	<ul style="list-style-type: none"> All resource options All years 2 “typical” days/month Four-hour time blocks 	 <p>Typical January 2030 Peak Day</p> <p>Load [GW]</p> <p>Hour of Day</p>
Production Cost (EnCompass)	Detailed operational and economic analysis of a single portfolio	<ul style="list-style-type: none"> Fixed portfolio Every hour of every year Single weather scenario Single outage scenario 	 <p>January 15, 2030</p> <p>Load [GW]</p> <p>Hour of Day</p>
SERVIM	Detailed reliability analysis under a variety of conditions	<ul style="list-style-type: none"> Fixed portfolio Every hour of a single study year 41 weather scenarios 50 outage scenarios 	 <p>January 15, 2030</p> <p>Load [GW]</p> <p>Hour of Day</p>

BREADTH

DEPTH

CONFIDENTIAL

AGO
Docket No. E-100, Sub 179
2022 Carbon Plan
AGO Data Request No. 6
Item No. 6-2
Page 1 of 1

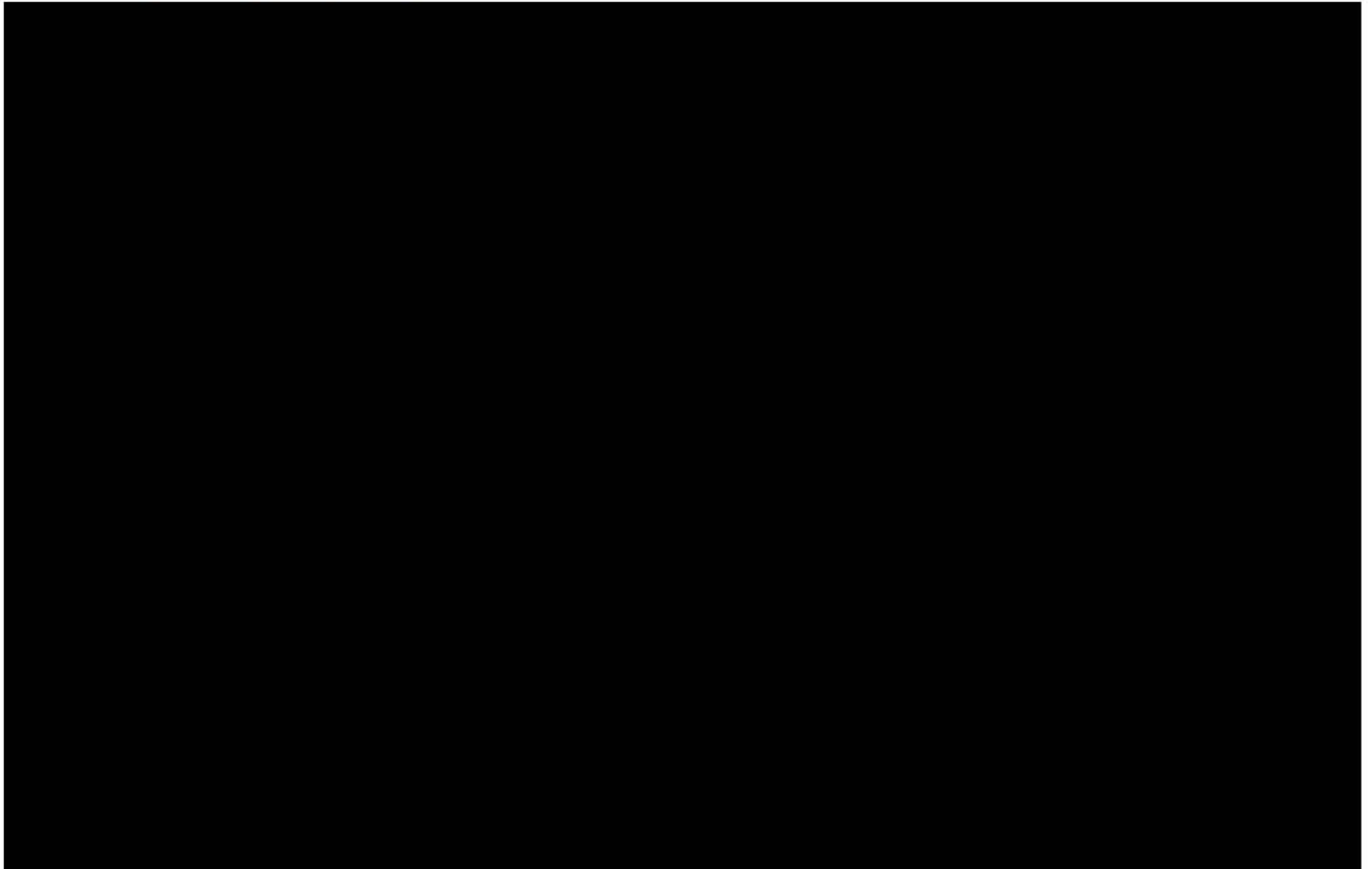
DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please refer to Table E-46

- a. Please explain whether it would be feasible to convert Belews Creek Units 1 & 2 to operate on 100% natural gas versus 50%.
- b. Please provide any evaluations or studies Duke has conducted of the feasibility of this conversion.
- c. Please provide any estimates of the cost of this conversion.

CONFIDENTIAL RESPONSE:



CONFIDENTIAL

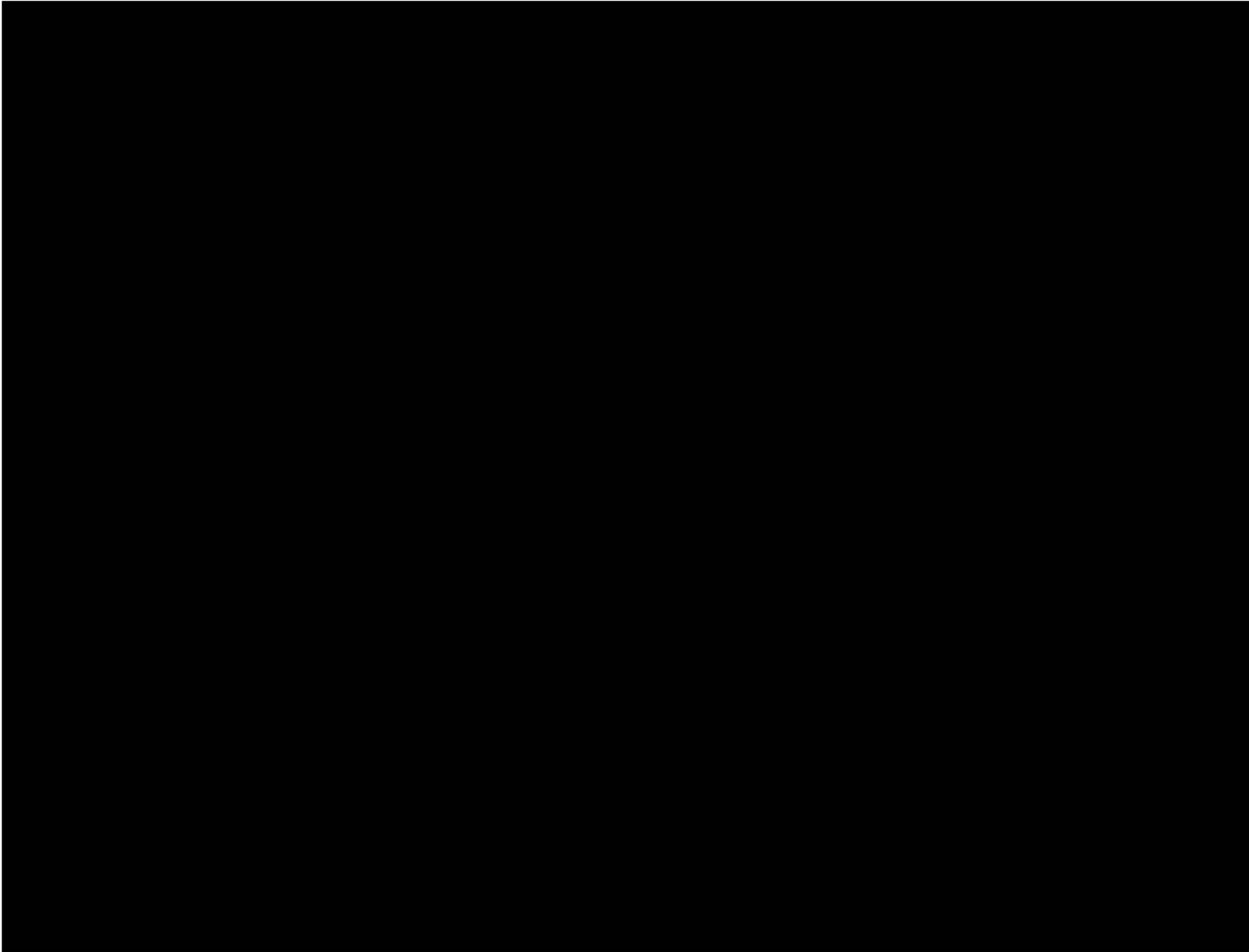
CIGFUR
Docket No. E-100, Sub 179
2022 Carbon Plan
CIGFUR Data Request No. 1
Item No. 1-22
Page 1 of 2

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please provide a detailed list of any natural gas pipeline projects that are relied upon in the assumptions underpinning all portfolios, and state what the status is of each. Please also state what the cost differential (delta, \$ and % compared to Portfolios P1, P2, P3, and P4) is estimated to be for each portfolio in the event that the supply of natural gas and availability of pipeline capacity assumed in the Carbon Plan is not correct.

CONFIDENTIAL RESPONSE:



I/A

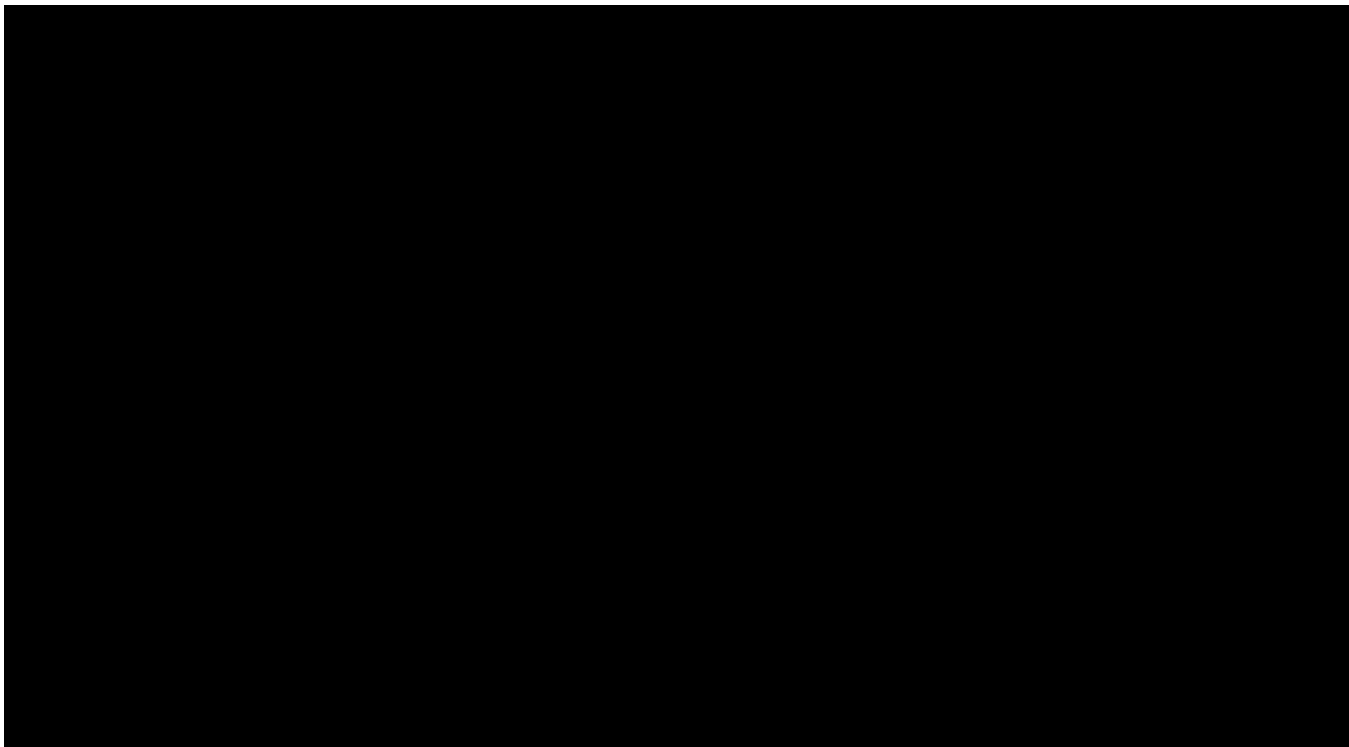
Docket No. E-100, Sub 179
Modeling and Near-Term Actions Panel Rebuttal Exhibit 3
Page 2 of 2

PUBLIC VERSION

CIGFUR
Docket No. E-100, Sub 179
2022 Carbon Plan
CIGFUR Data Request No. 1
Item No. 1-22
Page 2 of 2

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Exp 09 2022



AGO
Docket No. E-100, Sub 179
2022 Carbon Plan
AGO Data Request No. 8
Item No. 8-9
Page 1 of 1

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please provide the total FT capacity assumed by Duke for each portfolio modeled by Duke (i.e., P1-P4, P1A-P4A, SP5-SP6, and SP5A-SP6A).

CONFIDENTIAL RESPONSE:

The Companies have provided in the attached file, " Confidential AGO DR 8-9 - Carbon Plan and Supplemental Portfolios FT.xlsx" showing the total incremental interstate FT capacity for each Carbon Plan and Supplemental Portfolio. FT is shown to support the remainder of the existing CC fleet and new CC capacity. New interstate FT capacity for CTs is zero for all portfolios, as these portfolio are supported with firm capacity through USLD on-site backup fuel.



CONFIDENTIAL%20
AGO%20DR%208-9%

Responder: Michael T. Quinto, Lead Engineer

I/A

CONFIDENTIAL

CONFIDENTIAL													
Docket #E-100, Sub 179													
AGO 8-9													

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Exp 07/2022

STATE CORPORATION COMMISSION

I/A

AT RICHMOND, APRIL 30, 2021 -- SCC-CLERK'S OFFICE
COURT CONTROL CENTER

2021 APR 30 P 2: 58

COMMONWEALTH OF VIRGINIA, *ex rel.*

STATE CORPORATION COMMISSION

Ex Parte: Establishing 2020 RPS Proceeding for
Virginia Electric and Power Company

CASE NO. PUR-2020-00134

FINAL ORDER

During its 2020 Session, the Virginia General Assembly enacted Chapters 1193 (HB 1526) and 1194 (SB 851) of the 2020 Virginia Acts of Assembly. These duplicate Acts of Assembly, known as the Virginia Clean Economy Act ("VCEA"), became effective on July 1, 2020. The VCEA, *inter alia*, establishes a mandatory renewable energy portfolio standard program ("RPS Program") for Virginia Electric and Power Company ("Dominion" or "Company") in new § 56-585.5 of the Code of Virginia ("Code"). Subdivision D 4 of Code § 56-585.5 requires Dominion to submit annually to the State Corporation Commission ("Commission") a plan and petition for approval for the development of new solar and onshore wind generation capacity ("RPS Filing").¹

On October 30, 2020, Dominion submitted its first RPS Filing to the Commission ("2020 RPS Filing" or "Petition"). The 2020 RPS Filing requests the Commission:

- (i) approve the Company's annual plan for the development of new solar, onshore wind, and energy storage resources ("RPS Development Plan");
- (ii) grant certificates of public convenience and necessity ("CPCNs") and approval to construct and operate three solar generating facilities ("CE-1 Solar Projects") totaling approximately 82 megawatts ("MW") pursuant to Code § 56-580 D and

¹ By Order Establishing 2020 RPS Proceedings issued on July 10, 2020 ("RPS Filing Requirements Order"), the Commission docketed this proceeding and directed Dominion to include certain additional information in its first RPS Filing.

Bill Analysis. In its RPS Filing Requirements Order, the Commission directed Dominion to file projected customer bill impact information through 2035 associated with its RPS Development Plan.²⁴ Separately, in the Company's 2020 IRP Final Order, the Commission directed the Company to provide customer bill impact information over the next ten years for the least cost VCEA plan, the Company's preferred plan, and any additional plans presented.²⁵ Dominion takes issue with the Commission requiring a bill analysis in both its IRP and RPS proceedings, and requests that the Company prospectively provide a bill analysis in either the IRP or the RPS proceeding, but not in both.²⁶

The Commission finds the Company shall continue to file a bill analysis in both the IRP and RPS proceedings. To address Dominion's concerns and reduce potential confusion, we direct the Company to file a consolidated bill analysis that pertains to both the IRP and RPS proceedings, a subset of which would be RPS-related costs. Such consolidated bill analysis shall comply with the requirements set forth in the Commission's 2020 IRP Final Order, except as noted below.²⁷ Such consolidated bill analysis shall (i) include the same level of detail and public designation for RPS-related costs, consistent with what has been presented for RPS-related costs in this proceeding, and (ii) correspond to the Company's most recent IRP and RPS plans.²⁸

²⁴ See RPS Filing Requirements Order; Ex. 2 (Petition) at Exhibit 2 (RPS Development Plan) at Attachment 6.

²⁵ 2020 IRP Final Order at 15-16.

²⁶ See Ex. 47 (Trexler Rebuttal) at 2.

²⁷ 2020 IRP Final Order at 15-16. The Commission further finds that the consolidated bill analysis shall provide such information through 2035, rather than 10 years as set forth in the 2020 IRP Final Order.

²⁸ See Tr. 428-429. We further direct Staff and the Company to work together, as necessary, to develop the form and contents of the consolidated bill analysis. See Tr. 429.

Reply all Delete Report ...

CUCA - Bateman Rebuttal - Cross Exam. Ex. 1

RE: [EXTERNAL] Excel File

You forwarded this message on Sat 7/10/2021 1:08 PM

BA

Bateman, Laura Anne <Laura.Bateman@duke-energy.com>

To: Kevin O'Donnell; Maness, Mike <mike.maness@psncuc.nc.gov>

Cc: Stillman, Phillip O <Phillip.Stillman@duke-energy.com>

Mon 4/12/2021 5:25 PM



IRP base plus TandD impact ...

122 KB

Hope you both had a great weekend!

Here is the file that supports the chart that Phil shared at the meeting we were at.

Let us know if you have any questions.

Thanks,
Laura

Laura Bateman
Carolinas Rates & Regulatory Strategy
Duke Energy
laura.bateman@duke-energy.com
919-741-8903 (cell)

From: Kevin O'Donnell <kodonnell@novaenergyconsultants.com>

Sent: Friday, April 9, 2021 2:13 PM

To: Bateman, Laura Anne <Laura.Bateman@duke-energy.com>; Maness, Mike <mike.maness@psncuc.nc.gov>

Subject: RE: [EXTERNAL] Excel File

Laura:

You are right. I am focused on the grid mod as it is the primary driver in the years ahead. Can you please ask Phil to send me that chart in a working Excel format?

Thanks,
Kevin

From: Bateman, Laura Anne <Laura.Bateman@duke-energy.com>

Sent: Friday, April 9, 2021 1:52 PM

To: Kevin O'Donnell <kodonnell@novaenergyconsultants.com>; Maness, Mike <mike.maness@psncuc.nc.gov>

Subject: RE: [EXTERNAL] Excel File

ESTIMATES ONLY

DEC Retail

Class	IRP Base Plan		All T&D (Incl Grid Mod)		Total Impacts (2)		Average Monthly Bill (1)			Average yearly increase in average bill	
	Avg Annual Impact		Avg Annual Impact		Avg Annual Impact					2020 to 2030	
	2030	2035	2030	2035	2030	2035	2020	2030	2035	2020 to 2030	2030 to 2035
RESIDENTIAL	0.7%	1.3%	2.3%	1.7%	3.0%	3.0%	\$ 111	\$ 145	\$ 168	\$ 4	\$ 6
COMMERCIAL	0.7%	1.3%	2.3%	1.7%	3.0%	3.0%	\$ 12,561	\$ 16,362	\$ 19,019	\$ 422	\$ 664
INDUSTRIAL	0.7%	1.3%	0.3%	0.2%	0.9%	1.6%	\$ 1,743,561	\$ 1,895,144	\$ 2,170,071	\$ 16,843	\$ 68,732

Note 1

2020 Average Monthly Bill based on Jan 2021 EEI typical bills

Residential - 1,000 KWh per month

Commercial - 180,000 KWh / 500 KW

Industrial - 32,500,000 KWh / 50,000 KW

Note 2

Does not include coal ash, maintenance investments at existing non-fossil plants, general or intangible plant, depreciation of existing rate base or changes in ADIT for existing plant in service, other changes in rate base, changes in O&M, changes in tax rates, or other unforeseen changes in costs.

High level analysis, assumes perfect ratemaking for all costs, costs allocated at high level, not at more precise cost of service level as would be done in rate case.

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Sept 08 2022

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
ALLOCATION PERCENTAGES (Based on Revenue Requirement split)																
GENERATION COSTS																
Residential	36.2%	45.8%	46.1%	46.5%	46.9%	47.2%	47.5%	47.7%	47.9%	48.1%	48.3%	48.6%	48.8%	49.1%	49.3%	49.5%
COMMERCIAL	37.0%	17.8%	17.8%	17.8%	17.8%	17.8%	17.8%	17.8%	17.8%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%
INDUSTRIAL	26.4%	30.5%	30.2%	29.9%	29.6%	29.3%	29.1%	28.9%	28.7%	28.6%	28.4%	28.3%	28.1%	27.9%	27.8%	27.6%
OTHER	0.4%	5.9%	5.9%	5.8%	5.8%	5.7%	5.7%	5.6%	5.5%	5.4%	5.4%	5.3%	5.2%	5.1%	5.0%	4.9%
TRANSMISSION COSTS																
Residential	36.2%	45.8%	46.1%	46.5%	46.9%	47.2%	47.5%	47.7%	47.9%	48.1%	48.3%	48.6%	48.8%	49.1%	49.3%	49.5%
COMMERCIAL	37.0%	17.8%	17.8%	17.8%	17.8%	17.8%	17.8%	17.8%	17.8%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%
INDUSTRIAL	26.4%	30.5%	30.2%	29.9%	29.6%	29.3%	29.1%	28.9%	28.7%	28.6%	28.4%	28.3%	28.1%	27.9%	27.8%	27.6%
OTHER	0.4%	5.9%	5.9%	5.8%	5.8%	5.7%	5.7%	5.6%	5.5%	5.4%	5.4%	5.3%	5.2%	5.1%	5.0%	4.9%
DISTRIBUTION COSTS																
Residential	49.2%	65.9%	66.1%	66.3%	66.6%	66.7%	66.9%	67.1%	67.2%	67.4%	67.5%	67.7%	67.9%	68.1%	68.3%	68.4%
COMMERCIAL	50.3%	25.6%	25.4%	25.3%	25.2%	25.1%	25.1%	25.0%	25.0%	25.0%	25.0%	24.9%	24.9%	24.8%	24.8%	24.7%
INDUSTRIAL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
OTHER	0.5%	8.6%	8.5%	8.3%	8.2%	8.1%	8.0%	7.9%	7.8%	7.6%	7.5%	7.3%	7.2%	7.1%	7.0%	6.8%
COST OF SERVICE REVENUE REQUIREMENT (2021 from cost of service - 2022-2035 re allocated based on MWh sales growth to keep "rates constant")																
Residential	\$ 3,055	\$ 3,055.32	\$ 3,077.69	\$ 3,101.08	\$ 3,127.40	\$ 3,146.01	\$ 3,162.86	\$ 3,176.96	\$ 3,189.39	\$ 3,200.35	\$ 3,211.38	\$ 3,224.00	\$ 3,239.58	\$ 3,255.09	\$ 3,269.67	\$ 3,280.24
COMMERCIAL	\$ 1,186	\$ 1,186.04	\$ 1,185.02	\$ 1,184.91	\$ 1,184.91	\$ 1,184.91	\$ 1,185.25	\$ 1,185.93	\$ 1,186.62	\$ 1,187.13	\$ 1,187.33	\$ 1,187.30	\$ 1,186.95	\$ 1,186.61	\$ 1,186.46	\$ 1,186.62
INDUSTRIAL	\$ 2,032	\$ 2,031.94	\$ 2,034.24	\$ 1,993.58	\$ 1,971.71	\$ 1,954.48	\$ 1,937.41	\$ 1,923.28	\$ 1,910.71	\$ 1,900.08	\$ 1,889.88	\$ 1,879.10	\$ 1,866.17	\$ 1,853.33	\$ 1,840.85	\$ 1,831.26
OTHER	\$ 397	\$ 396.63	\$ 394.14	\$ 389.44	\$ 385.34	\$ 382.87	\$ 378.21	\$ 374.28	\$ 369.02	\$ 361.93	\$ 357.89	\$ 349.86	\$ 344.48	\$ 338.67	\$ 333.17	\$ 327.84
Total	\$ 6,670	\$ 6,670	\$ 6,671	\$ 6,669	\$ 6,669	\$ 6,668	\$ 6,664	\$ 6,660	\$ 6,656	\$ 6,649	\$ 6,646	\$ 6,640	\$ 6,637	\$ 6,634	\$ 6,630	\$ 6,626
MWH																
Residential	28,612,000	28,612,000	28,944,000	29,271,000	29,649,000	29,917,000	30,192,000	30,467,000	30,757,000	31,043,000	31,346,000	31,670,000	32,023,000	32,372,000	32,723,000	33,074,000
COMMERCIAL	29,257,000	29,257,000	29,356,000	29,461,000	29,572,000	29,668,000	29,803,000	29,958,000	30,143,000	30,332,000	30,528,000	30,722,000	30,906,000	31,085,000	31,278,000	31,516,000
INDUSTRIAL	20,909,000	20,909,000	20,815,000	20,677,000	20,540,000	20,423,000	20,322,000	20,267,000	20,247,000	20,252,000	20,270,000	20,283,000	20,270,000	20,253,000	20,244,000	20,289,000
OTHER	319,588	319,588	318,931	316,286	314,329	313,273	310,722	308,836	306,195	302,067	300,576	295,708	292,989	289,798	286,902	284,419
Total	79,097,588	79,097,588	79,433,931	79,725,286	80,075,329	80,321,273	80,627,722	81,000,836	81,453,195	81,929,067	82,444,576	82,970,708	83,491,989	83,999,798	84,531,902	85,163,419
TOTAL RETAIL REVENUE REQUIREMENTS (Only includes IRP Base case plus T&D)																
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
INITIAL REVENUE REQUIREMENT	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670
IRP BASE CASE	-	-	(0)	155	248	296	303	312	398	491	574	707	800	1,059	1,268	1,673
GIP	-	-	-	64	178	274	306	326	321	313	305	297	290	282	275	268
Other Distribution	-	-	-	40	117	201	313	445	533	615	694	772	848	921	993	1,063
Transmission	-	-	-	19	47	79	95	103	122	141	159	177	195	211	228	244
TOTAL OF ABOVE	6,670	6,669	6,949	7,260	7,520	7,687	7,857	8,043	8,229	8,402	8,623	8,802	9,144	9,434	9,918	10,314
Retail MWh Sales	79,097,588	79,097,588	79,433,931	79,725,286	80,075,329	80,321,273	80,627,722	81,000,836	81,453,195	81,929,067	82,444,576	82,970,708	83,491,989	83,999,798	84,531,902	85,163,419
Cost per MWh (Cents per KWH)	\$ 8.43	\$ 8.43	\$ 8.75	\$ 9.11	\$ 9.39	\$ 9.57	\$ 9.74	\$ 9.93	\$ 10.10	\$ 10.26	\$ 10.46	\$ 10.61	\$ 10.95	\$ 11.23	\$ 11.73	\$ 12.11
Annual % Increase			0.0%	3.7%	4.1%	3.1%	1.9%	1.8%	1.9%	1.7%	1.5%	2.0%	1.4%	3.2%	2.5%	4.5%
Average Annual Increase											2.4%					2.4%
RESIDENTIAL REVENUE REQUIREMENTS																
INITIAL REVENUE REQUIREMENT	3,055	3,055	3,078	3,101	3,127	3,146	3,163	3,177	3,189	3,200	3,211	3,224	3,240	3,255	3,270	3,280
IRP BASE CASE	-	-	72	115	139	143	148	190	235	276	341	388	517	622	825	987
GIP	-	-	42	118	183	204	218	215	210	205	201	196	192	187	183	178
Other Distribution	-	-	26	78	134	209	298	358	413	468	521	574	626	676	726	774
Transmission	-	-	9	22	37	45	49	58	67	77	86	94	103	112	120	128
TOTAL OF ABOVE	3,055	3,055	3,227	3,434	3,619	3,747	3,876	3,997	4,115	4,226	4,360	4,477	4,677	4,853	5,123	5,348
Residential MWh Sales	28,612,000	28,612,000	28,944,000	29,271,000	29,649,000	29,917,000	30,192,000	30,467,000	30,757,000	31,043,000	31,346,000	31,670,000	32,023,000	32,372,000	32,723,000	33,074,000
Cost per MWh (Cents per KWH)	\$ 10.68	\$ 10.68	\$ 11.15	\$ 11.73	\$ 12.21	\$ 12.52	\$ 12.84	\$ 13.12	\$ 13.38	\$ 13.61	\$ 13.91	\$ 14.14	\$ 14.61	\$ 14.99	\$ 15.66	\$ 16.17
Annual % Increase			0.0%	4.4%	5.2%	4.1%	2.6%	2.5%	2.2%	2.0%	1.8%	2.2%	1.6%	3.3%	2.6%	4.4%
											2.4%					2.4%
COMMERCIAL																
INITIAL REVENUE REQUIREMENT	1,186	1,186	1,185	1,185	1,184	1,184	1,185	1,186	1,187	1,187	1,187	1,187	1,187	1,187	1,186	1,187
IRP BASE CASE	-	-	28	44	53	54	56	71	88	102	126	143	189	227	299	357
GIP	-	-	16	45	69	77	82	80	78	76	74	72	70	68	66	64
Other Distribution	-	-	10	30	51	79	112	133	154	179	211	229	247	263	280	280
Transmission	-	-	3	8	14	17	18	22	25	28	32	35	38	41	44	46
TOTAL OF ABOVE	1,186	1,186	1,242	1,312	1,370	1,411	1,453	1,492	1,531	1,568	1,612	1,649	1,714	1,769	1,859	1,934
Commercial MWh Sales	29,257,000	29,257,000	29,356,000	29,461,000	29,572,000	29,668,000	29,803,000	29,958,000	30,143,000	30,332,000	30,528,000	30,722,000	30,906,000	31,085,000	31,278,000	31,516,000
Cost per MWh (Cents per KWH)	\$ 4.05	\$ 4.05	\$ 4.23	\$ 4.45	\$ 4.63	\$ 4.75	\$ 4.87	\$ 4.98	\$ 5.08	\$ 5.17	\$ 5.28	\$ 5.37	\$ 5.54	\$ 5.69	\$ 5.94	\$ 6.14
Annual % Increase			0.0%	4.4%	5.2%	4.1%	2.6%	2.5%	2.2%	2.0%	1.8%	2.2%	1.6%	3.3%	2.6%	4.4%
											2.4%					2.4%
INDUSTRIAL																
INITIAL REVENUE REQUIREMENT	2,032	2,032	2,014	1,994	1,972	1,954	1,937	1,923	1,911	1,900	1,890	1,879	1,866	1,853	1,841	1,831
IRP BASE CASE	-	-	47	74	87	89	91	115	141	164	201	226	298	354	464	551
GIP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transmission	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OF ABOVE	2,032	2,032	2,067	2,082	2,083	2,071	2,058	2,073	2,092	2,109	2,141	2,160	2,223	2,271	2,373	2,454
Industrial MWh Sales	20,909,000	20,909,000	20,815,000	20,677,000	20,540,000	20,423,000	20,322,000	20,267,000	20,247,000	20,252,000	20,270,000	20,283,000	20,270,000	20,253,000	20,244,000	20,289,000
Cost per MWh (Cents per KWH)	\$ 9.72	\$ 9.72	\$ 9.93	\$ 10.07	\$ 10.14	\$ 10.14	\$ 10.13	\$ 10.13	\$ 10.23	\$ 10.33	\$ 10.42	\$ 10.56	\$ 10.65	\$ 10.97	\$ 11.21	\$ 11.72
Annual % Increase			0.0%	2.2%	1.4%	0.7%	0.0%	-0.1%	1.0%	1.0%	0.8%	1.4%	0.8%	3.0%	2.2%	4.5%
											0.9%					1.4%
OTHER																
INITIAL REVENUE REQUIREMENT	397	397	394	389	385	383	378	374	369	362	358	350	344	339	333	328
IRP BASE CASE	-	-	9	14	17	17	18	22	27	31	38	42	55	65	84	98
GIP	-	-	5	15	22	26	26	25	24	23	22	21	20	19	18	19
Other Distribution	-	-	3	10	16	25	36	42	48	53	58	62	67	70	74	77
Transmission	-	-	1	3	5	5	6	7	8	9	10	10	11	12	12	13
TOTAL OF ABOVE	397	397	413	431	446	456	464	471	476	478	486	486	496	505	522	534
Other MWh Sales	319,588	319,588	318,931	316,286	314,329	313,273	310,722	308,836	306,195	302,067	300,576	295,708	292,989	289,798	286,902	284,419
Cost per MWh (Cents per KWH)	\$ 124.11	\$ 124.11	\$ 129.57	\$ 136.34	\$ 141.88	\$ 145.55	\$ 149.21	\$ 152.49	\$ 155.95	\$ 158.23	\$ 161.66	\$ 164.29	\$ 169.75	\$ 174.22	\$ 181.97	\$ 187.91
Annual % Increase			0.0%	4.4%	5.2%	4.1%	2.6%	2.5%	2.2%	2.0%	1.8%	2.2%	1.6%	3.3%	2.6%	4.4%
											2.4%					2.4%

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High Level Revenue Requirement

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Changes to Capital Spend & in service (in total company dollars)																	
Distribution - Plant in Service	System			\$ 650	\$ 1,100	\$ 900	\$ 300	\$ 250									
Assumes GIP is distribution only for high-level modeling purposes; some portion will be transmission and general/intangible plant																	
Changes to Capital Spend (in NC/SC Retail dollars)																	
Distribution	99.47%	\$ -	\$ -	\$ -	\$ 646.5	\$ 1,094.1	\$ 895.2	\$ 298.4	\$ 248.7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distribution (Normal) - Revenue Requirement																	
Gross Plant in Service	-	-	-	647	1,741	2,636	2,934	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183	3,183
Accumulated Depreciation	-	-	-	(7)	(33)	(80)	(140)	(206)	(275)	(344)	(413)	(481)	(550)	(619)	(688)	(756)	(825)
Net Plant	-	-	-	640	1,708	2,556	2,794	2,977	2,908	2,839	2,770	2,702	2,633	2,564	2,495	2,427	2,358
PIS - Vintage year 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 4	-	-	-	647	647	647	647	647	647	647	647	647	647	647	647	647	647
PIS - Vintage year 5	-	-	-	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094
PIS - Vintage year 6	-	-	-	895	895	895	895	895	895	895	895	895	895	895	895	895	895
PIS - Vintage year 7	-	-	-	298	298	298	298	298	298	298	298	298	298	298	298	298	298
PIS - Vintage year 8	-	-	-	249	249	249	249	249	249	249	249	249	249	249	249	249	249
PIS - Vintage year 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax Depreciation Rate (MACR's 20)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17
Book Depreciation Rate	3.75%	7.22%	6.68%	6.18%	5.71%	5.29%	4.89%	4.52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%
Tax Rate	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%
ADIT "Factor"	23.35%	-0.37%	-1.18%	-1.05%	-0.94%	-0.83%	-0.73%	-0.64%	-0.55%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%
ADIT - Vintage year 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 4	-	-	-	(2.4)	(10.0)	(16.9)	(22.9)	(28.3)	(33.0)	(37.1)	(40.7)	(44.2)	(47.6)	(51.1)	(54.6)	(58.1)	(61.5)
ADIT - Vintage year 5	-	-	-	(4.1)	(17.0)	(28.5)	(38.8)	(47.9)	(55.8)	(62.8)	(68.8)	(74.7)	(80.6)	(86.5)	(92.4)	(98.2)	(104.1)
ADIT - Vintage year 6	-	-	-	(3.3)	(13.9)	(23.3)	(31.7)	(39.2)	(45.7)	(51.4)	(56.3)	(61.1)	(66.0)	(70.8)	(75.6)	(80.4)	(85.2)
ADIT - Vintage year 7	-	-	-	(1.1)	(4.6)	(7.8)	(10.6)	(13.1)	(15.2)	(17.1)	(18.8)	(20.4)	(22.0)	(23.6)	(25.2)	(26.8)	(28.4)
ADIT - Vintage year 8	-	-	-	(0.9)	(3.9)	(6.5)	(8.8)	(10.9)	(12.7)	(14.3)	(15.6)	(17.0)	(18.3)	(19.6)	(20.9)	(22.2)	(23.5)
ADIT - Vintage year 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT (MACRS 20)	-	-	-	(2)	(14)	(37)	(66)	(96)	(124)	(149)	(171)	(191)	(209)	(226)	(243)	(260)	(277)
Total Ratebase	-	-	-	637	1,694	2,519	2,728	2,881	2,784	2,690	2,599	2,511	2,424	2,338	2,252	2,166	2,081
Return Requirement	8.56%	-	-	-	55	145	216	234	247	238	230	223	215	208	200	193	185
Depreciation	2.16%	-	-	-	7	26	47	60	66	69	69	69	69	69	69	69	69
Property Tax	0.42%	-	-	-	3	7	11	12	13	13	13	13	13	13	13	13	13
Retail Revenue Requirement	-	-	-	64	178	274	306	326	321	313	305	297	290	282	275	268	260
Cummulative additional requirements	\$ -	\$ -	\$ -	\$ 64.3	\$ 178.2	\$ 274.1	\$ 306.1	\$ 326.2	\$ 320.6	\$ 312.6	\$ 304.8	\$ 297.3	\$ 289.8	\$ 282.4	\$ 275.1	\$ 267.7	\$ 260.4

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High Level Revenue Requirement

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Changes to Capital Spend & in service (in total company dollars)																	
Distribution - Plant in Service	System			\$ 400	\$ 750	\$ 800	\$ 1,100	\$ 1,300	\$ 870	\$ 870	\$ 870	\$ 870	\$ 870	\$ 870	\$ 870	\$ 870	\$ 870
Changes to Capital Spend (in NC/SC Retail dollars)																	
Distribution	99.47%	\$ -	\$ -	\$ -	\$ 397.9	\$ 746.0	\$ 795.7	\$ 1,094.1	\$ 1,293.1	\$ 865.4	\$ 865.4	\$ 865.4	\$ 865.4	\$ 865.4	\$ 865.4	\$ 865.4	\$ 865.4
Distribution (Normal) - Revenue Requirement																	
Gross Plant in Service	-	-	-	398	1,144	1,940	3,034	4,327	5,192	6,057	6,923	7,788	8,654	9,519	10,384	11,250	12,115
Accumulated Depreciation	-	-	-	(4)	(21)	(54)	(108)	(187)	(290)	(412)	(552)	(711)	(889)	(1,085)	(1,300)	(1,533)	(1,786)
Net Plant	-	-	-	394	1,123	1,885	2,926	4,139	4,902	5,646	6,371	7,077	7,765	8,434	9,084	9,716	10,329
PIS - Vintage year 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 4	-	-	-	398	398	398	398	398	398	398	398	398	398	398	398	398	398
PIS - Vintage year 5	-	-	-	-	746	746	746	746	746	746	746	746	746	746	746	746	746
PIS - Vintage year 6	-	-	-	-	-	796	796	796	796	796	796	796	796	796	796	796	796
PIS - Vintage year 7	-	-	-	-	-	-	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094	1,094
PIS - Vintage year 8	-	-	-	-	-	-	-	1,293	1,293	1,293	1,293	1,293	1,293	1,293	1,293	1,293	1,293
PIS - Vintage year 9	-	-	-	-	-	-	-	-	865	865	865	865	865	865	865	865	865
PIS - Vintage year 10	-	-	-	-	-	-	-	-	-	865	865	865	865	865	865	865	865
PIS - Vintage year 11	-	-	-	-	-	-	-	-	-	-	865	865	865	865	865	865	865
PIS - Vintage year 12	-	-	-	-	-	-	-	-	-	-	-	865	865	865	865	865	865
PIS - Vintage year 13	-	-	-	-	-	-	-	-	-	-	-	-	865	865	865	865	865
PIS - Vintage year 14	-	-	-	-	-	-	-	-	-	-	-	-	-	865	865	865	865
PIS - Vintage year 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	865	865	865
PIS - Vintage year 16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	865	865
PIS - Vintage year 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	865
Tax Depreciation Rate (MACRS's 20)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17
Book Depreciation Rate	3.75%	7.22%	6.68%	6.18%	5.71%	5.29%	4.89%	4.52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%
Tax Rate	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%
ADIT "Factor"	-0.37%	-1.18%	-1.05%	-0.94%	-0.83%	-0.73%	-0.64%	-0.55%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%	-0.54%
ADIT - Vintage year 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 4	-	-	-	(1.5)	(6.2)	(10.4)	(14.1)	(17.4)	(20.3)	(22.8)	(25.0)	(27.2)	(29.3)	(31.5)	(33.6)	(35.7)	(37.9)
ADIT - Vintage year 5	-	-	-	-	(2.8)	(11.6)	(19.4)	(26.4)	(32.6)	(38.1)	(42.8)	(46.9)	(51.0)	(55.0)	(59.0)	(63.0)	(67.0)
ADIT - Vintage year 6	-	-	-	-	-	(3.0)	(12.4)	(20.7)	(28.2)	(34.8)	(40.6)	(45.7)	(50.1)	(54.3)	(58.6)	(62.9)	(67.2)
ADIT - Vintage year 7	-	-	-	-	-	-	(4.1)	(17.0)	(28.5)	(38.8)	(47.9)	(55.8)	(62.8)	(68.8)	(74.7)	(80.6)	(86.5)
ADIT - Vintage year 8	-	-	-	-	-	-	-	(4.8)	(20.1)	(33.7)	(45.8)	(56.6)	(66.0)	(74.2)	(81.4)	(88.3)	(95.3)
ADIT - Vintage year 9	-	-	-	-	-	-	-	-	(3.2)	(13.4)	(22.6)	(30.7)	(37.9)	(44.2)	(49.7)	(54.5)	(59.1)
ADIT - Vintage year 10	-	-	-	-	-	-	-	-	-	(3.2)	(13.4)	(22.6)	(30.7)	(37.9)	(44.2)	(49.7)	(54.5)
ADIT - Vintage year 11	-	-	-	-	-	-	-	-	-	-	(3.2)	(13.4)	(22.6)	(30.7)	(37.9)	(44.2)	(49.7)
ADIT - Vintage year 12	-	-	-	-	-	-	-	-	-	-	-	(3.2)	(13.4)	(22.6)	(30.7)	(37.9)	(44.2)
ADIT - Vintage year 13	-	-	-	-	-	-	-	-	-	-	-	-	(3.2)	(13.4)	(22.6)	(30.7)	(37.9)
ADIT - Vintage year 14	-	-	-	-	-	-	-	-	-	-	-	-	-	(3.2)	(13.4)	(22.6)	(30.7)
ADIT - Vintage year 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(3.2)	(13.4)	(22.6)
ADIT - Vintage year 16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(3.2)	(13.4)
ADIT - Vintage year 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(3.2)
ADIT (MACRS 20)	-	-	-	(1)	(9)	(25)	(50)	(86)	(133)	(185)	(241)	(302)	(367)	(436)	(509)	(587)	(669)
Total Ratebase	-	-	-	392	1,114	1,860	2,876	4,053	4,769	5,461	6,129	6,775	7,398	7,998	8,576	9,130	9,660
Return Requirement	8.56%	-	-	34	95	159	246	347	408	468	525	580	633	685	734	782	827
Depreciation	2.16%	-	-	4	17	33	54	80	103	122	140	159	178	196	215	234	252
Property Tax	0.42%	-	-	2	5	8	13	18	22	26	29	33	37	40	44	48	51
Retail Revenue Requirement	-	-	-	40	117	201	313	445	533	615	694	772	848	921	993	1,063	1,131

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High Level Revenue Requirement

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Changes to Capital Spend & in service (in total company dollars)																	
Transmission - Plant in Service	System			\$ 300	\$ 400	\$ 475	\$ 225	\$ 150	\$ 310	\$ 310	\$ 310	\$ 310	\$ 310	\$ 310	\$ 310	\$ 310	\$ 310
Changes to Capital Spend (in NC/SC Retail dollars)																	
Production																	
Transmission	65.77%	\$ -	\$ -	\$ -	\$ 197.3	\$ 263.1	\$ 312.4	\$ 148.0	\$ 98.7	\$ 203.9	\$ 203.9	\$ 203.9	\$ 203.9	\$ 203.9	\$ 203.9	\$ 203.9	\$ 203.9
Transmission - Revenue Requirement																	
Gross Plant in Service		-	-	-	197	460	773	921	1,019	1,223	1,427	1,631	1,835	2,039	2,243	2,447	2,651
Accumulated Depreciation		-	-	-	(2)	(9)	(21)	(38)	(58)	(81)	(108)	(139)	(174)	(214)	(257)	(305)	(357)
Net Plant		-	-	-	195	452	752	882	961	1,142	1,319	1,492	1,661	1,825	1,985	2,142	2,294
PIS - Vintage year 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIS - Vintage year 4					197	197	197	197	197	197	197	197	197	197	197	197	197
PIS - Vintage year 5						263	263	263	263	263	263	263	263	263	263	263	263
PIS - Vintage year 6							312	312	312	312	312	312	312	312	312	312	312
PIS - Vintage year 7								148	148	148	148	148	148	148	148	148	148
PIS - Vintage year 8									99	99	99	99	99	99	99	99	99
PIS - Vintage year 9										204	204	204	204	204	204	204	204
PIS - Vintage year 10											204	204	204	204	204	204	204
PIS - Vintage year 11												204	204	204	204	204	204
PIS - Vintage year 12													204	204	204	204	204
PIS - Vintage year 13														204	204	204	204
PIS - Vintage year 14															204	204	204
PIS - Vintage year 15																204	204
PIS - Vintage year 16																	204
PIS - Vintage year 17																	204
Tax Depreciation Rate (MACR's 15 & 20)		4.38%	8.36%	7.61%	6.94%	6.32%	5.76%	5.40%	5.21%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%
Book Depreciation Rate		2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%	2.04%
Tax Rate	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%	23.35%
ADIT "Factor"		-0.55%	-1.48%	-1.30%	-1.14%	-1.00%	-0.87%	-0.78%	-0.74%	-0.74%	-0.74%	-0.74%	-0.74%	-0.74%	-0.74%	-0.74%	-0.39%
ADIT - Vintage year 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 3					-	-	-	-	-	-	-	-	-	-	-	-	-
ADIT - Vintage year 4					(1.1)	(4.0)	(6.6)	(8.8)	(10.8)	(12.5)	(14.1)	(15.5)	(17.0)	(18.4)	(19.9)	(21.3)	(22.8)
ADIT - Vintage year 5						(1.4)	(5.3)	(8.7)	(11.8)	(14.4)	(16.7)	(18.7)	(20.7)	(22.6)	(24.6)	(26.5)	(28.4)
ADIT - Vintage year 6							(1.7)	(6.3)	(10.4)	(14.0)	(17.1)	(19.8)	(22.3)	(24.6)	(26.9)	(29.2)	(31.5)
ADIT - Vintage year 7								(0.8)	(3.0)	(4.9)	(6.6)	(8.1)	(9.4)	(10.5)	(11.6)	(12.7)	(13.8)
ADIT - Vintage year 8									(0.5)	(2.0)	(3.3)	(4.4)	(5.4)	(6.3)	(7.0)	(7.8)	(8.5)
ADIT - Vintage year 9										(1.1)	(4.1)	(6.8)	(9.1)	(11.2)	(12.9)	(14.5)	(16.0)
ADIT - Vintage year 10											(1.1)	(4.1)	(6.8)	(9.1)	(11.2)	(12.9)	(14.5)
ADIT - Vintage year 11												(1.1)	(4.1)	(6.8)	(9.1)	(11.2)	(12.9)
ADIT - Vintage year 12													(1.1)	(4.1)	(6.8)	(9.1)	(11.2)
ADIT - Vintage year 13														(1.1)	(4.1)	(6.8)	(9.1)
ADIT - Vintage year 14															(1.1)	(4.1)	(6.8)
ADIT - Vintage year 15																(1.1)	(4.1)
ADIT - Vintage year 16																	(1.1)
ADIT - Vintage year 17																	(1.1)
ADIT (MACR's 15 & 20 yr)		-	-	-	(1)	(5)	(14)	(25)	(36)	(49)	(63)	(79)	(96)	(115)	(135)	(157)	(181)
Total Ratebase		-	-	-	194	446	738	858	925	1,093	1,256	1,413	1,565	1,710	1,850	1,984	2,113
Return Requirement	8.56%	-	-	-	17	38	63	73	79	94	108	121	134	146	158	170	181
Depreciation	2.04%	-	-	-	2	7	13	17	20	23	27	31	35	39	44	48	52
Property Tax	0.42%	-	-	-	1	2	3	4	4	5	6	7	8	9	10	10	11
Retail Revenue Requirement		-	-	-	19	47	79	95	103	122	141	159	177	195	211	228	244

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Cost of Capital (PER NC SETTLEMENT)						
	%	Cost	weighted	Tax Rate	Pre-tax	After Tax
Equity	52.0%	9.6%	4.99%	23.93%	6.53%	4.99%
Debt	48.0%	4.8%	2.00%		2.00%	1.57%
			7.0436%		8.56%	6.56%

DEC NC - Cost of Capital						
	%	Cost	weighted	Tax Rate	Pre-tax	After Tax
Equity	52.0%	9.50%	5.15%	23.66%	6.74%	5.15%
Debt	48.0%	4.59%	2.20%		2.35%	1.88%
			7.3512%		8.95%	6.83%

DEC SC - Cost of Capital						
	%	Cost	weighted	Tax Rate	Pre-tax	After Tax
Equity	53.0%	9.50%	5.04%	24.95%	6.71%	5.04%
Debt	47.0%	4.53%	2.11%		2.13%	1.60%
			7.1561%		8.94%	6.83%

Depreciation Rates			
Average	DEC-NC	DEC-SC	
Fossil	3.40%	3.40%	3.41%
Hydro	1.87%	1.87%	1.86%
Other Production	3.03%	3.00%	3.10%
Nuclear	3.38%	3.38%	3.39%
Transmission	2.04%	2.03%	2.05%
Distribution	2.36%	2.15%	2.19%
General	5.48%	5.53%	5.27%
Intangible	16.68%	15.56%	20.00%
Generic Investment	3.00%	3.00%	3.00%

Property Tax Rate			
Average	DEC-NC	DEC-SC	
Generic	0.42%	0.21%	1.03%

Allocation Factors to Retail			
Combined	DEC - NC	DEC - SC	
Production	90.24%	67.00%	23.24%
Transmission	60.77%	48.83%	16.84%
Distribution	99.47%	71.87%	25.59%
General & Intangible	91.17%	68.44%	21.17%
MWHT	91.23%	66.84%	24.39%
Net Plant (Generic)	90.46%	67.33%	21.13%
	0.744271162	0.255708838	

Production	74.25%	25.75%
Transmission	74.25%	25.75%
Distribution	74.27%	25.73%
General & Intangible	74.75%	25.25%
MWHT	73.27%	26.73%
Net Plant (Generic)	74.43%	25.57%

Class Allocations									
	Total NC Retail	Residential	Large Ind. (OPT)	General Service	Other	xxx	xxx	xxx	xxx
Production	100.00%	43.93%	34.45%	17.90%	3.72%				
Transmission	100.00%	43.93%	34.45%	17.90%	3.72%				
Distribution	100.00%	63.36%	10.70%	12.10%	13.84%				
General	100.00%	54.41%	21.91%	15.01%	8.43%				
MWHT (Energy)	100.00%	36.08%	44.02%	15.23%	4.66%				
Net Plant (Generic)	100.00%	50.94%	25.90%	15.82%	7.34%				

DEC - NC - 2018 Class Allocations					
Total NC Retail	Rate RS	Rate GS	Rate LT	Rate I	Rate OPT
Production	100.00%	45.44%	19.00%	0.01%	3.47%
Transmission	100.00%	45.44%	19.00%	0.01%	3.47%
Distribution	100.00%	64.23%	12.24%	11.76%	1.78%
General	100.00%	15.95%	15.62%	1.62%	2.46%
MWHT (Energy)	100.00%	17.68%	16.46%	1.10%	3.48%
Net Plant (Generic)	100.00%	52.22%	16.57%	4.22%	2.80%

DEC - NC - 2018 Class Allocations					
Total SC Retail	Rate RS	Rate GS	Rate LT	Rate I	Rate OPT
Production	100.00%	39.52%	14.71%	0.01%	4.43%
Transmission	100.00%	39.52%	14.71%	0.01%	4.43%
Distribution	100.00%	60.77%	11.70%	12.56%	2.15%
General	100.00%	10.72%	13.41%	6.31%	1.15%
MWHT (Energy)	100.00%	11.43%	11.66%	1.03%	3.86%
Net Plant (Generic)	100.00%	47.22%	13.62%	4.55%	3.60%

Book Payments From 2018 cost of service					
Total NC Retail	Residential	Large Ind. (OPT)	General Service	Other	
\$ 6,670	\$ 3,055	\$ 2,032	\$ 1,186	\$ 397	
DEC - NC					
\$ -	\$ 4,860	\$ 2,283	\$ 1,388	\$ 903	\$ 287
DEC - SC					
\$ 1,809	\$ 773	\$ 644	\$ 283	\$ 110	

Tax Depreciation Rates Most Commonly Used at Duke Energy

SL 3 Year	Software	Yr 1	Yr 2	Yr 3	Yr 4																	
		16.6670%	33.3330%	33.3330%	16.6670%																	
MACRS 5	Airplanes Automobiles Battery Storage Facilities Computer Equip Data handling Nuclear Fuel Smart Meters Solar Wind (incl. any batteries)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6															
		20.0000%	32.0000%	19.2000%	11.5200%	11.5200%	5.7600%															
MACRS 7	Communication Equip. Furniture and Fixtures General Equipment	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8													
		14.2860%	24.4900%	17.4920%	12.4950%	8.9250%	8.9250%	8.9250%	4.4620%													
MACRS 10 SG	Smartgrid (not smart meters)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11										
		7.5000%	13.8750%	11.7940%	10.0240%	8.7400%	8.7390%	8.7400%	8.7390%	8.7400%	8.7390%	4.3700%										
SL 15 Year	Licenses Leasehold Improv.	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15	Yr 16					
		3.3330%	6.6670%	6.6670%	6.6660%	6.6670%	6.6670%	6.6660%	6.6670%	6.6670%	6.6660%	6.6670%	6.6670%	6.6660%	6.6670%	6.6670%	3.3330%					
MACRS 15	CT's - Single Cycle Gas Dist (Up to 12/31/2010) Nuclear Transmission > 69kv	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15	Yr 16					
		5.0000%	9.5000%	8.5500%	7.6950%	6.9250%	6.2330%	5.9050%	5.9050%	5.9050%	5.9050%	5.9050%	5.9050%	5.9050%	5.9050%	5.9050%	2.9520%					
MACRS 20	Fossil Gas Dist (After 12/31/2010) Hydro CT's - Combined Cycle Distribution (not smartgrid) Transmission <= 69kv	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15	Yr 16	Yr 17	Yr 18	Yr 19	Yr 20	Yr 21
		3.7500%	7.2190%	6.6770%	6.1770%	5.7130%	5.2850%	4.8880%	4.5220%	4.4620%	4.4610%	4.4620%	4.4610%	4.4620%	4.4610%	4.4620%	4.4610%	4.4620%	4.4610%	4.4620%	4.4610%	2.2310%
SL 39	General Purpose Structures (Not Structures used exclusively for the production of electricity such as the Nuclear Containment Building or the structure that houses the Coal Boilers and Turbines) General plant type structures (office buildings, warehouses, garages, etc.)																					
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15	Yr 16	Yr 17	Yr 18	Yr 19	Yr 20	
		1.1752%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	
		Yr 21	Yr 22	Yr 23	Yr 24	Yr 25	Yr 26	Yr 27	Yr 28	Yr 29	Yr 30	Yr 31	Yr 32	Yr 33	Yr 34	Yr 35	Yr 36	Yr 37	Yr 38	Yr 39	Yr 40	
		2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	2.5641%	1.3889%	

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