## BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

## DOCKET NO. E-7, SUB 1276

In the Matter of:	)
Application of Duke Energy Carolinas,	) DIRECT TESTIMONY OF LAUDA A DATEMAN AND
LLC For Adjustment of Rates and Charges Applicable to Electric Service in	) LAURA A. BATEMAN AND PHILLIP O. STILLMAN FOR
North Carolina and Performance-Based Regulation	<ul><li>DUKE ENERGY CAROLINAS,</li><li>LLC</li></ul>
	)

1 <b>I.</b>	INTRODUCTION AND PURPOSE

- 2 Q. MS. BATEMAN, PLEASE STATE YOUR NAME AND BUSINESS
- 3 ADDRESS.
- 4 A. My name is Laura A. Bateman, and my business address is 411 Fayetteville
- 5 Street, Raleigh, North Carolina 27601.
- 6 Q. BEFORE INTRODUCING YOURSELF FURTHER, PLEASE
- 7 **INTRODUCE THE PANEL.**
- 8 A. I am appearing on behalf of Duke Energy Carolinas, LLC ("DEC" or "the
- 9 Company") together with Phillip Stillman on the "Performance Based
- 10 Regulation ("PBR") Policy Panel."
- 11 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
- 12 A. I am employed by DEC as Vice President of Carolinas Rates and Regulatory
- 13 Strategy.
- 14 Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL
- 15 **EXPERIENCE.**
- 16 A. I obtained a Bachelor's degree from the University of Massachusetts at Amherst
- and a Master of Business Administration degree from the University of North
- 18 Carolina at Chapel Hill. Since 2003, I have worked for the Company in a variety
- of roles in Risk Management, Treasury, and Regulatory. I have been in the Rates
- 20 & Regulatory Strategy group since 2007. I assumed my current position in April
- 21 2020.

1 Q. PLEASE BRIEFLY DESCRIBE YOUR DUTIES AS VICE PRESIDE	ENT
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- 2 OF CAROLINAS RATES AND REGULATORY STRATEGY.
- 3 A. I lead teams responsible for rate cases, annual rider filings, cost of service
- 4 studies, surveillance reporting, and regulatory strategy and planning for North
- 5 and South Carolina for DEC and Duke Energy Progress, LLC ("DEP").

#### 6 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?

- 7 A. Yes. I have testified before this Commission in connection with the Carbon Plan
- 8 in Docket No. E-100, Sub 179, and with DEP's general rate case proceedings
- 9 in Docket Nos. E-2, Sub 1142 and E-2, Sub 1023, and recently submitted pre-
- 10 filed Direct Testimony in DEP's pending rate case proceeding in Docket No. E-
- 2, Sub 1300. I have also testified before this Commission or submitted written
- testimony in The Investigation of Proposed Net Metering Rule (Docket No. E-
- 13 100, Sub 83), Standards for Electric Utilities Relating to IRP, Rate Design
- Modifications to Promote Energy Efficiency Investments, Smart Grid
- 15 Investments & Smart Grid Information Per Independence/Security Act 2007
- 16 (Docket No. E-100, Sub 123), and Application for Approval of Demand-Side
- Management and Energy Efficiency Cost Recovery Rider (Docket No. E-2, Sub
- 18 931).

#### 19 Q. MS. BATEMAN, PLEASE DESCRIBE THE PURPOSE OF YOUR

- **JOINT TESTIMONY.**
- 21 A. Our testimony supports DEC's Performance-Based Regulation Application
- 22 ("PBR Application" or the "Application"). I provide an overview of the
- Company's proposed PBR Application, including the policy and public interest

- 1 reasons supporting approval of the Application, and Mr. Stillman describes
- DEC's proposed Performance Incentive Mechanisms ("PIMs") and tracking
- metrics, for which the Company is seeking Commission approval.
- 4 Q. MR. STILLMAN, PLEASE STATE YOUR NAME AND BUSINESS
- 5 ADDRESS.
- 6 A. My name is Phillip O. Stillman, and my business address is 400 South Tryon
- 7 Street, Charlotte, North Carolina 28202.
- 8 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
- 9 A. I am employed by Duke Energy Business Services, LLC as Managing Director
- of Load Forecasting and Corporate Strategic Regulatory Initiatives.
- 11 Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL
- 12 **EXPERIENCE.**
- 13 A. I am a graduate of Catawba College, where I received a Bachelor of Arts Degree
- in Accounting and Business. I have also received a Master of Business
- Administration degree from the McColl Graduate School of Business at Queens
- 16 University of Charlotte. I am a certified public accountant licensed in the state
- of North Carolina. I began my career with Duke Power Company (now known
- as DEC) in 1986 as a staff accountant and have held a variety of positions in
- the finance, regulatory, and planning organizations. From 1992 to 2004, I served
- in various roles in the Financial Budgeting, Strategic Planning, and Load
- 21 Forecasting areas. During this time, I was named Director Financial Modeling
- and Load Forecasting. In 2004, I was appointed Director Financial and
- Regulatory Accounting. In this role, I was responsible for the general

1		accounting functions and the books and records of DEC. I joined the Rates &
2		Regulatory Department in 2007 as Director Regulatory Strategy & Research.
3		In 2014, I became Director of Load Forecasting. My responsibilities were
4		expanded in 2020 to include supporting various strategic regulatory initiatives,
5		and I assumed my current role as Managing Director of Load Forecasting and
6		Corporate Strategic Regulatory Initiatives.
7	Q.	PLEASE BRIEFLY DESCRIBE YOUR DUTIES AS MANAGING
8		DIRECTOR OF LOAD FORECASTING AND CORPORATE
9		STRATEGIC REGULATORY INITIATIVES.
10	A.	I oversee the development of the long-term electric load forecasts for each of
11		Duke Energy's electric service territories, as well as the long-term gas forecast
12		for the Ohio and Kentucky operations. I am also responsible for supporting
13		enterprise-wide regulatory initiatives across all of Duke Energy's six electric
14		utility jurisdictions and assisting with the execution of the company's regulatory
15		strategy.
16	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?
17	A.	Yes. I have testified before this Commission in support of DEC's general rate
18		case proceedings in Docket Nos. E-7, Sub 909, E-7, Sub 989, and E-7, Sub
19		1026, and recently submitted pre-filed Direct Testimony in DEP's pending rate
20		case proceeding in Docket No. E-2, Sub 1300. I also provided testimony in
21		support of DEC's application for a certificate of public convenience and

necessity in Docket No. E-7, Sub 1134.

1	Q.	DO YOU HAVE ANY EXHIBITS TO YOUR DIRECT TESTIMONY?
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- 2 A. Yes. PBR Policy Panel Exhibit 1 provides the design detail for the Company's
- proposed Peak Load Reduction PIM. PBR Policy Panel Exhibit 2 provides the
- design detail for the Company's proposed Low-Income/Affordability PIM.
- 5 PBR Policy Panel Exhibit 3 provides the design detail for the Company's
- 6 proposed Reliability PIM. PBR Policy Panel Exhibit 4 provides the design
- 7 detail for the Company's proposed Renewables Integration and Encouragement
- 8 PIM.
- 9 Q. MR. STILLMAN, WERE PBR POLICY PANEL EXHIBITS 1
- 10 THROUGH 4 PREPARED OR PROVIDED HEREIN BY YOU, UNDER
- 11 YOUR DIRECTION AND SUPERVISION?
- 12 A. Yes. They were.
- 13 II. OVERVIEW OF PBR APPLICATION
- 14 Q. MS. BATEMAN, PLEASE PROVIDE BACKGROUND FOR THE
- 15 **COMPANY'S PBR APPLICATION.**
- 16 A. Traditional ratemaking presents inherent limitations and disadvantages under
- today's business conditions. Utilities are shifting from construction of large-
- scale power plants to smaller, more frequent investments, such as for grid
- improvements, and to meet clean energy goals. In the meantime, cost growth is
- accelerated by inflation. Traditional ratemaking would address these challenges
- 21 with frequent rate cases that raise regulatory cost. Modernized regulatory
- 22 models can improve regulatory efficiency, provide timelier rate recognition of

changes in costs, and better align utility revenues and performance with customer and public policy goals.

At the end of 2019, North Carolina Governor Roy Cooper issued a Clean Energy Plan report, and one of the recommendations was to convene a stakeholder process to look at ways to modernize the electric utility cost recovery mechanisms in the State to better align with the goals of the Clean Energy Plan. In 2020, the Company participated in the stakeholder process – the North Carolina Energy Regulatory Process ("NERP") – along with a diverse group of participants, including regulators, environmental and low-income advocates, industrial customers, solar developers, and utility representatives. At the end of that year, the NERP recommended that North Carolina adopt a PBR model for ratemaking that features:

- 1. A Multiyear Rate Plan ("MYRP") a mechanism under which the Commission sets base rates for a multi-year period, along with an Earning Sharing Mechanism ("ESM") that shares earnings with customers if the utility's earnings exceed a certain level;
- 2. Revenue Decoupling a mechanism to break the link between a utility's revenue and the volume of consumption of electricity; and
- 3. PIMs a mechanism that uses metrics to link a portion of the revenue or earnings of a utility to its performance on measurable customer, utility system, or public policy outcomes.

According to NERP, "PBR offers a suite of reforms that, together, can resolve limitations of [traditional cost of service] ratemaking while encouraging utilities to better serve state policy goals and customer interests."

On October 13, 2021, the Governor signed into law House Bill 951<sup>2</sup> ("HB 951"), which largely adopted the NERP recommendations, including the three features listed above, and added customer protections and more specifics on the mechanisms. HB 951 puts North Carolina at the forefront of the clean energy transition and modernizes the regulatory framework by authorizing the use of PBR. HB 951's PBR provisions – codified in N.C. Gen. Stat. §62-133.16 ("PBR Statute") – update the ratemaking paradigm with a balanced approach that will streamline regulation, strengthen utility performance incentives, and better align the regulatory framework with customer benefits and public policy goals.

In this case, DEC is seeking approval of its first PBR Application. The PBR Application provides clear evidence that it is in the public interest to implement PBR at this time and that proposed rates are just and reasonable.<sup>3</sup> We believe that our PBR Application provides a clear basis for the Commission to make this finding.

<sup>&</sup>lt;sup>1</sup> NERP PBR – Study Group Work Products, PBR Regulatory Guidance, at 6 (2020) (available at https://deq.nc.gov/media/17684/download).

<sup>&</sup>lt;sup>2</sup> 2021 N.C. Sess. Laws-165.

<sup>&</sup>lt;sup>3</sup> N.C. Gen. Stat. § 62-133.16(d)(1).

1	Q.	WHAT ARE THE COMPONENTS OF THE COMPANY'S PBR
2		PROPOSAL?
3	A.	The Company's PBR proposal includes the following three components:
4		1. A three-year MYRP with an ESM;
5		2. A revenue per customer decoupling mechanism for the residential customer
6		class;
7		3. Four PIMs and three tracking metrics.
8		<u>MYRP</u>
9		The Company is proposing a three-year MYRP with the following Rate
10		Years: January 2024-December 2024 (Rate Year 1); January 2025-December
11		2025 (Rate Year 2); and January 2026-December 2026 (Rate Year 3). As
12		described in the testimony and exhibits of Witness Kathryn Taylor, the MYRP
13		revenue requirement for each Rate Year will build on the revenue requirement
14		established using the historical test year (2021) using base rate "step-ups" that
15		reflect the projected revenue requirements associated with MYRP capital
16		spending projects that will be used and useful during the course of the MYRP.
17		Detailed information about the projects included in the MYRP,
18		including timing, scope, and cost estimates, are provided by DEC's witnesses
19		as follows:
20		• Witnesses Daniel Maley and Brent Guyton discuss the Company's
21		proposed transmission and distribution investments;
22		Witness Justin LaRoche supports the proposed solar projects;

- Witnesses Laurel Meeks and Evan Shearer discuss the proposed energy
   storage projects;
  - Witness Bryan Walsh supports the proposed fossil and hydro capital investments; and
  - Witness Steven Capps addresses the proposed nuclear investments.

With respect to the ESM, if the Company's adjusted earnings exceed the authorized return on equity ("ROE") determined in this proceeding plus 50 basis points, the excess earnings above this threshold will be distributed to customers in the annual ESM Rider.

## **Decoupling**

The Company is proposing a residential revenue per customer decoupling mechanism. The mechanism is intended to break the link between the Company's profits and usage per customer in the residential class. This link is already broken for reductions in usage resulting from the Company's Demand-Side Management ("DSM") and Energy Efficiency ("EE") programs through the recovery of net lost revenues through the DSM/EE rider. Decoupling goes a step further and removes any financial incentive related to increased usage per customer and any financial disincentive related to decreased usage per customer outside of the Company's DSM/EE programs, such as reduced sales from (1) deployment of distributed energy resources ("DER"), (2) customer efficiency and conservation efforts that are not part of a utility program, and (3) certain rate designs or other utility programs that may not qualify as an approved DSM/EE program. The decoupling mechanism

would true-up any difference between actual residential revenue per customer, excluding variable costs, and the target residential revenue per customer, excluding variable costs, established in this case. Any net lost revenues collected through the Company's DSM/EE rider are subtracted from this balance so as to not double count and increases in sales from electric vehicle ("EV") charging are excluded from the mechanism, as allowed by the PBR Statute, in order to continue to incent adoption of EVs. After each rate year, the decoupling mechanism balance is collected from or distributed to residential customers through the Residential Decoupling Mechanism rider (Rider RDM).

#### PIMs and Tracking Metrics

Finally, the Company's PBR Application includes four proposed PIMs and three tracking metrics. The annual PIMs rider is designed to distribute or collect penalties and rewards based on DEC's performance with respect to Commission-approved PIMs during each rate year. Following this section, the remainder of our testimony is devoted to describing the Company's proposed PIMs and how they effectuate certain policy goals in the PBR Statute.

#### **PBR Riders**

In accordance with the PBR Statute, the Company's PBR Application includes three new riders associated with these mechanisms: (1) Residential Decoupling Mechanism rider (Rider RDM), (2) Earnings Sharing Mechanism rider (Rider ESM), and (3) the Performance Incentive Mechanism rider (Rider PIM). Witness Taylor describes the methodology for calculating each of these mechanisms and explains that the rider associated with each mechanism is set

at \$0 for Rate Year 1 and will be updated thereafter as part of the annual review process prescribed by Commission Rule 1-17B. Witness Morgan Beveridge provides the rate schedules for these riders.

## 4 Q. HOW DO CUSTOMERS BENEFIT FROM THE COMPANY'S PBR 5 PROPOSAL?

A.

Many customers do not want to see their electricity rates increase, even where such increases are caused by reasonable and prudent investments needed to ensure reliable service. However, the Company has invested over \$5 billion in our generation, transmission, and distribution systems since the last rate case and is entering a period of significant new reliability and clean energy investments. The PBR approach to ratemaking is better than frequent rate cases for addressing these challenges. Cost containment incentives would be reinforced under the Company's PBR proposal, and the proposed PIMs will strengthen incentives for reliability and other performance areas that customers care about. The Company's PBR proposal also has several customer protections. In particular, the statutory cap on rate escalation in years two and three of the MYRP and the statutory asymmetrical sharing of earnings surpluses (but not deficits) are significant benefits to customers.

Finally, PBR better aligns customer and state policy goals with utility revenues and performance than traditional ratemaking. Other Company witnesses discuss the customer benefits and achievement of policy goals that will result from the specific projects, programs, and rate designs contained in this case. I provide several examples in my testimony below.

## 1 Q. DOES A MYRP DECREASE RISK FOR THE UTILITY AT THE

#### **EXPENSE OF CUSTOMERS?**

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A. Not on balance. While the proposed MYRP would result in more timely rate increases, and revenue decoupling reduces the risk of residential revenue erosion and volatility, other provisions of the plan that conform to the PBR Statute actually increase utility risk. For instance, projected increases in interest rates, inflationary increases in operations and maintenance ("O&M") expenses and future capital spending not related to the discrete MYRP projects cannot be included in the MYRP revenue increases and therefore must be managed by DEC during the MYRP. For example, if inflation is expected to be unusually high over the MYRP, DEC cannot factor expected increases in overall O&M into its Rate Year 2 and 3 rates. Again, this adds more risk to the Company, especially when the country is experiencing a period of anticipated increasing inflationary cost pressures. Similarly, the Company bears all the execution risk for MYRP projects in that it must manage unforeseen increases in project costs. For instance, if the costs of the authorized capital spending projects unexpectedly increase, DEC would not be allowed to true-up those costs and recover more from customers. As such, the utility retains all of the same cost containment incentives of traditional ratemaking. The utility must continue to manage cost increases in O&M, general taxes, material and supplies, and depreciation, and attempt to ensure that such costs do not exceed increases in revenue from load growth, decreases in rate base from depreciation of existing assets, and other cost decreases.

Finally, the ESM allows the Commission to "reach back" and require sharing of past utility earnings with customers, which it never has been able to do under traditional ratemaking. Moreover, this sharing is asymmetrical – the ESM distributes to customers 100% of earnings in excess of 50 basis points above the authorized ROE (if any) on an annual basis; whereas there is no corresponding ability for DEC to automatically collect additional revenue from customers if the utility is underearning. The Company's only remedy would be to file another rate case. The asymmetrical, narrow nature of the ESM, therefore, puts all the downside risk on the utility.

#### Q. WHY IS DEC'S PBR APPLICATION IN THE PUBLIC INTEREST?

A.

The Company's PBR Application balances DEC's need for modernized cost recovery mechanisms to address smaller, more frequent investments (such as for grid improvements and DER enablement) with enhanced customer benefits to align the Company's performance with customer expectations. As discussed above, the proposed MYRP encourages effective cost management and affords customers a number of special protections.

Importantly, as demonstrated throughout the testimony and exhibits of DEC's witnesses in this case,<sup>4</sup> the Company's PBR Application furthers the majority of the 11 public policy goals that the Commission may consider in evaluating a PBR application:

<sup>&</sup>lt;sup>4</sup> For ease of reference, I have included summaries of witness testimony and exhibits that support various policy goals below. The descriptions of the projects and initiatives and the conclusions tying the project or initiative to specific policy goals are supported by each referenced witness. What I have included is not intended to be an exhaustive list, but rather some examples of how the Company's PBR Application furthers these goals and is in the public interest.

1	a. Encourages peak load reduction or efficient use of the system.
2	b. Encourages utility-scale renewable energy and storage.
3	c. Encourages DERs.
4	d. Reduces low-income energy burdens.
5	e. Encourages energy efficiency.
6	f. Encourages carbon reductions.
7	g. Encourages beneficial electrification, including electric vehicles.
8	h. Supports equity in contracting.
9	i. Promotes resilience and security of the electric grid.
10	j. Maintains adequate levels of reliability and customer service.
11	k. Promotes rate designs that yield peak load reduction or beneficial
12	load-shaping. <sup>5</sup>
13	For example, as described by Witness Guyton and detailed in Guyton
14	Exhibit 6, the Company's proposed distribution MYRP projects fulfill many of
15	these objectives. As outlined in Guyton Exhibit 6, capacity upgrades and
16	improvements enhance reliability and support future load growth from
17	electrification and integration of DERs, such as rooftop solar and battery
18	storage. The self-optimizing grid program improves system reliability and
19	resiliency, restores outages faster, and manages the dynamic two-way power

flows that expansion of DERs will bring. Integrated Volt Var Control will

establish control of distribution equipment to optimize delivery voltages and

power factors, and Voltage Regulation Management will add or upgrade devices

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<sup>&</sup>lt;sup>5</sup> N.C. Gen. Stat. § 62-133.16(d)(2).

to support DERs and EVs. Distribution hardening and resiliency programs will improve grid strength and ability to rapidly restore power, which promotes resilience and security of the electric grid, maintains adequate levels of reliability and customer service, and promotes DER adoption by providing consistent power flow. Targeted undergrounding, which reduces the number of outages experienced by customers, results in improved reliability, reduced outage costs, and improved customer experience.

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The transmission projects described by Witness Maley, and included in Maley Exhibit 4, provide a similar array of benefits. As discussed in Maley Exhibit 4, the transmission system is an essential part of the Company's power delivery network, and any disruption in the flow of electricity across the system can interrupt service for thousands of customers across entire regions. The transmission hardening and resiliency project works to create a stronger transmission grid capable of withstanding (or quickly recovering from) extreme external events, natural or man-made. In addition, the system intelligence project provides grid operators with enhanced information to respond to changing conditions that challenge reliability, which can promote efficient use of the system and resilience and security of the grid, as well as maintain reliability. Planned upgrades of breakers and transformers are expected to improve reliability, strengthen the grid, and increase operational efficiency. Transmission expansion projects will facilitate the connection of additional utility-scale renewable generation sources and encourage beneficial electrification and DERs.

Additional MYRP projects included in this case also encourage utility-scale renewable development and storage. In his testimony and LaRoche Exhibit 1, Witness LaRoche describes the Company's 2026 Solar Procurement Program Investment, which will advance utility-scale solar deployment and encourage carbon reductions. As detailed by Witnesses Meeks and Shearer, the Company is also proposing to place in service over the course of the MYRP the Frieden, Monroe, Novant Health, Lowgap, Nebo, Rich Mountain, Longtown, Farr's Bridge, and Allen battery energy storage projects. In addition to furthering the goal of encouraging utility-scale storage, these witnesses explain that DEC's battery energy storage portfolio is expected to benefit customers by reducing carbon emissions, encouraging DERs, maintaining grid reliability, and promoting local community clean energy investment.

Witness Capps testifies that DEC is seeking subsequent license renewal ("SLR") for all of its nuclear plants. He explains that due to its zero carbon emissions, the Company's nuclear fleet represents a crucial piece of achieving a successful energy transition in the Carolinas, and seeking SLR for the fleet is therefore in the best interest of customers continuing to benefit from affordable and reliable electric energy as well as from reduced carbon emissions. In addition, he notes that 33 nuclear projects are included in the Company's proposed MYRP, which will enable DEC to maintain safe and reliable operation of the nuclear stations as DEC continues to transition into a cleaner energy future.

Witness Jonathan Byrd describes how the Company's rate designs with refreshed time-of-use ("TOU") periods benefit customers and advance several policy goals. He explains that the new TOU periods properly align price signals to the cost differences that exist across seasons and hours, encouraging peak load reduction and efficient system usage. He notes that the proposed on-peak periods of three-hour duration provide the opportunity for economic use of battery storage in a manner aligned with system cost. Superior price signals to customers encourage adoption of new technologies, such as smart energy management devices, energy storage, and EVs. Higher on-peak prices encourage customers to improve insulation and invest in more efficient HVAC systems by providing price signals to use such technology to push energy consumption away from the peak. The proposed discount periods encourage EV charging or other flexible consumption during times of low system costs, providing incentives for DER adoption. Moreover, the exclusion of EV loads from revenue decoupling strengthens the Company's incentive to encourage EVs.

Witnesses Bradley Harris and Lesley Quick discuss how DEC supports our low-income customers and describe new program proposals that will provide additional support and resources to address their needs. For example, the Company's Payment Navigator program provides tailored recommendations to assist struggling customers in becoming current on payments and provides longer-term guidance for how to ease their electric energy burden, *e.g.*, by connecting customers to assistance funding, referring

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1		customers to DSM/EE options, or enrolling them in programs like Budget
2		Billing. The proposed Customer Assistance Program will directly benefit low-
3		income customers by reducing their monthly electric energy burden through a
4		bill discount. The Tariffed On-Bill Program offers customers an option to
5		finance EE investments.
6		Finally, the Company's proposed PIMs and tracking metrics would
7		strengthen DEC's incentives to advance several additional goals of the PBR
8		Statute, as Mr. Stillman describes in the next section of our testimony.
9	Q.	THE COMMISSION RECENTLY ISSUED AN ORDER ADOPTING
10		THE INITIAL CARBON PLAN.6 AMONG OTHER THINGS, THE
11		CARBON PLAN ORDER DIRECTS DEC AND DEP TO ADDRESS THE
12		RATE DISPARITY BETWEEN THE UTILITIES ATTRIBUTABLE TO
13		THE CARBON PLAN, AND WHERE APPROPRIATE, PRESENT
14		SOLUTIONS. WHAT STEPS ARE DEC AND DEP TAKING TO
15		COMPLY WITH THIS DIRECTIVE?

A. As I explained in the Carbon Plan proceeding, the projected impact of the Carbon Plan on current rate differences prior to the targeted DEC/DEP merger date at the end of 2026 is minimal to non-existent. Most of the investments included in DEC's MYRP in this case, and DEP's MYRP in Docket Number E-2, Sub 1300, are projects that make sense for customers regardless of the carbon reduction goals set forth in HB 951. However, as discussed below, the Company offers the following information related to the steps DEC and DEP are taking

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<sup>&</sup>lt;sup>6</sup> Order Adopting Initial Carbon Plan and Providing Direction For Future Planning, Docket No. E-100, Sub 179 (Dec. 30, 2022) ("Carbon Plan Order").

to address and minimize future rate differences between the utilities attributable to the Carbon Plan.

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First, as explained by Witness Maley, DEC's MYRP includes Red Zone Expansion Plan ("RZEP") transmission projects, which are transmission upgrades needed primarily to enable interconnection of additional solar generation on the DEC transmission system. DEP's MYRP also includes RZEP transmission projects to be located in DEP's service territory. In the Carbon Plan proceeding, several parties raised concerns that these projects were disproportionately located in DEP's service territory because DEP's service territory is in general a more attractive location for solar generation. The Company continues to believe that a merger of DEC and DEP targeted for the end of 2026 is the best long-term solution for customers of both utilities and that the revenue requirements prior to 2027 are not significant enough to warrant an alternative allocation method. However, if the Commission believes that an alternative allocation method is warranted, Witness Taylor's testimony provides an alternative allocation of these RZEP project revenue requirements and shows what the North Carolina retail revenue requirement would be for both DEC and DEP if the revenue requirement for the RZEP transmission projects were redistributed to the two utilities based on their North Carolina retail transmission demand load ratio share. As Witness Taylor explains, DEC is not recommending the alternative allocation method, but included it should the Commission determine that it is more appropriate.

Second, DEC and DEP have taken steps to mitigate rate disparity that could result from the 2022 Solar Procurement. Pursuant to an agreement between the Companies and the Public Staff, which was later approved by the Commission in the 2022 Solar Procurement Proceeding, a 1,200 MW Target Procurement Volume was established for solar generation. Of this amount, one-third of the Target Procurement Volume is to be located in DEC, one-third in DEP, and the remaining one-third is to be procured from the least cost remaining projects, whether located in DEP or DEC territory. The establishment of a minimum level of MWs for each utility was an attempt to mitigate an increase in rate disparity that could result from a greater imbalance in the winning bids between the two utilities.

Third, the Company expects the Inflation Reduction Act of 2022 ("IRA") will have benefits that reduce the cost of new solar and storage investments. DEC has incorporated the estimated IRA tax benefits associated with solar and energy storage MYRP projects in its MYRP revenue requirement. Witness Taylor provides testimony and exhibits quantifying, as best as DEC can do at this time in light of the uncertainties attendant upon implementation of the IRA, the expected IRA tax credit impacts on the Company's MYRP revenue requirement. Similarly, DEP is in the process of preparing an update to DEP's MYRP revenue requirements to reflect estimates of IRA tax benefits for DEP's MYRP solar and storage projects, which will be

<sup>&</sup>lt;sup>7</sup> Order Permitting Additional CPRE Program Procurement and Establishing Target Procurement Volume for the 2022 Solar Procurement, Docket Nos. E-2, Sub 1159, E-2, Sub 1297, E-7, Sub 1156 and E-7, Sub 1268 (November 1, 2022).

5	III. PERFORMANCE INCENTIVE MECHANISMS
4	disparity between the utilities attributable to the Carbon Plan.
3	resulting from the Carbon Plan, and thereby also reduce any furtherance of rate
2	credit impacts on MYRP solar and storage projects should reduce rate impacts
1	included in DEP's first supplemental filing. Incorporation of estimated IRA tax

## PERFORMANCE INCENTIVE MECHANISMS

#### 6 Q. MR. STILLMAN, PLEASE EXPLAIN WHAT PIMS AND TRACKING

#### 7 METRICS ARE.

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A.

Generally speaking, PIMs are a rate-making mechanism that links utility revenue or earnings to utility performance in targeted areas consistent with policy goals. They include specific performance metrics and targets against which utility performance is measured. PIMs were discussed extensively in the NERP PBR Working Group and are a key and required component of PBR under HB 951. A particular advantage of PIMs is their ability to align utility financial incentives with policy goals.

Tracking metrics are useful for monitoring and quantitatively measuring utility outcomes or performance and are reported to demonstrate progress toward a particular outcome without financial impacts. Tracking metrics can also be used to measure and develop an approach that can serve as a basis to inform future PIMs.

#### 20 Q. WHAT GUIDELINES DOES HB 951 PROVIDE FOR METRICS AND

#### 21 PIMS?

22 A. Under HB 951, a PBR application shall include one or more PIMs and may also 23 include proposed tracking metrics. A PIM must be consistent with a policy goal, which is defined in N.C. Gen. Stat. §62-133.16(a)(8) as "the expected or anticipated achievement of operational efficiency, cost-savings, or reliability of electric service" that is greater than existing federal, state, or Commission law, regulation, or standards, except that an environmental policy goal cannot be more stringent than state or federal standards. Policy goals targeted by a PIM must be clearly defined, measurable with a defined performance metric, and solely or primarily within the utility's control pursuant to N.C. Gen. Stat. §62-133.16(c)(3).

N.C. Gen. Stat. §62-133.16(c)(4) provides that the total of all potential and actual PIM incentives or penalties cannot exceed 1% of the utility's total annual revenue requirement that is used to fix rates during the first year of a MYRP, excluding any revenue requirement for the capital projects to be placed in service during the first Rate Year. DSM and EE incentives are excluded from the 1% cap and shall continue to be recovered through the utility's DSM/EE rider. Any utility-proposed PIM must include one or more of the following: (1) rewards based on the sharing of savings achieved by meeting or exceeding a specific policy goal; (2) rewards or penalties based on differentiated authorized rates of return on common equity, with a maximum of 25 basis points, to encourage utility investments or operational changes to meet a specific policy goal; and (3) fixed financial rewards to encourage achievement of specific policy goals, or fixed financial penalties for failure to achieve policy goals pursuant to N.C. Gen. Stat. §62-133.16(c)(5).

In its February 10, 2022 Order Adopting Rule R1-17B in Docket No. E-
100, Sub 178 ("PBR Rule Order"), the Commission declined to open a separate
docket to establish policy goals and declined to adopt rules requiring specific
PIMs or outlining specific guidelines for designing PIMs outside of what is
prescribed in the statute. In declining to prescribe specific policy goals or PIMs
that must be included in a PBR application, the Commission sought "to preserve
flexibility and the ability for the Commission and all parties to learn and adapt
as policy issues evolve." PBR Rule Order, at p. 24. The Commission further
explained that "its decision on PIMs proposed within the context of a PBR
application filed by a utility will be made based on the record in that specific
case." Id. Commission Rule R1-17B requires additional details and explanation
about proposed PIMs, which I will address later in my testimony and exhibits.
Consistent with these requirements, and after taking into consideration diverse
stakeholder feedback and interests across numerous forums, DEC has
developed four proposed PIMs and three proposed tracking metrics to advance
important policy goals as part of its initial PBR Application.

# Q. HOW DID THE COMPANY CONSIDER STAKEHOLDER FEEDBACK WHEN DEVELOPING ITS PROPOSED PIMS?

DEC and DEP participated in the pre-HB 951 NERP PBR Working Group, whose work product contained policy goal and PIM recommendations from the diverse stakeholders who participated in that process. In written comments submitted as part of the Commission's Rule R1-17B rulemaking process, some intervenors advocated for a separate policy goals docket and/or proposed

A.

specific PIMs and PIMs criteria. Subsequent to the issuance of the PBR Rule
Order, DEC and DEP voluntarily invited stakeholders who intervened in the
PBR Rulemaking Docket and/or participated in the NERP PBR Working Group
and also historically have intervened in DEC and DEP general rate cases to
participate in a PIMs stakeholder engagement process. In July 2022, DEC and
DEP hosted two stakeholder sessions to discuss policy goals and PIMs, which
were attended by representatives from the Public Staff, the Attorney General's
Office, Carolinas Clean Energy Business Association, Carolina Industrial
Group for Fair Utility Rates ("CIGFUR"), Carolina Utility Customers
Association, ElectriCities, Southern Environmental Law Center ("SELC") (on
behalf of North Carolina Justice Center, North Carolina Housing Coalition,
Southern Alliance for Clean Energy and Sierra Club), North Carolina
Sustainable Energy Association, Appalachian Voices, Commercial
Group/Walmart, North Carolina Electric Membership Corporation, the Tech
Customers (Apple Inc., Google LLC, and Meta Platforms, Inc.), and North
Carolina Waste Awareness and Reduction Network ("NC WARN"). As part of
the first meeting, participants reviewed the 11 PIM policy goal areas
recommended by the NERP PBR Working Group as well as the essentially
identical 11 policy goal areas contained in N.C. Gen. Stat. §62-133.16(d)(2), in
addition to additional policy goals proposed by participants. In the second
stakeholder meeting, SELC, NC WARN, CIGFUR, and Appalachian Voices
proposed PIMs and/or tracking metrics, and DEC presented potential PIMs and
tracking metrics for stakeholder discussion. Following the stakeholder sessions,

1		DEC considered the feedback received and finalized the proposed PIMs and
2		tracking metrics it is including in its PBR Application. In particular, based upon
3		stakeholder feedback, DEC has added a reliability PIM and PIM metrics related
4		to customer renewable programs for consideration by the Commission.
5	Q.	PLEASE PROVIDE AN OVERVIEW OF THE PIMS THE COMPANY IS
6		PROPOSING IN ITS PBR APPLICATION.
7	A.	DEC is proposing the following four PIMs as part of its PBR Application:
8		(1) Peak Load Reduction: This PIM encourages the Company to reduce peak
9		load and is based on the estimated winter peak kilowatt ("kW") reduction
10		associated with new customer enrollment in DEC's dynamic and time-
11		differentiated rate programs. This PIM has a shared savings-like structure that
12		will allocate 30% of the total peak reduction joint benefit to the Company and
13		70% to customers. This PIM is upside-only to the Company.
14		(2) <u>Low-Income/Affordability</u> : This PIM provides incentives for the Company
15		to encourage voluntary contributions to its existing Share the Light Fund, which
16		provides financial assistance to customers who are struggling to pay their
17		energy bills, through a structure that establishes graduated shareholder
18		contributions and shareholder bonus matching contributions to fund health and
19		safety repairs for low-income residences based upon target levels of
20		contributions to the Share the Light Fund. This PIM is downside-only to the
21		Company.
22		(3) Reliability: This PIM holds DEC accountable to maintain service reliability

as measured by the System Average Interruption Duration Index ("SAIDI")

(excluding Major Event Days "MEDs"). This PIM is downside-only to the
Company and features graduated penalties to be distributed to customers for
failure to maintain SAIDI below tiered threshold levels that are to be based
upon historic averages adjusted for statistical confidence levels and increased
outages due to additional grid work that is expected during the MYRP.
(4) <u>Renewables Integration and Encouragement</u> : This PIM is upside-only to the
Company and has three subpart components to incent and reward the Company
for (A) integrating additional DERs that are located on customer premises; (B)
designing, obtaining regulatory approval for, and offering new renewable
programs subscribed to by large customers; and (C) designing, obtaining
regulatory approval for, and offering new shared solar programs subscribed to
by residential customers.
As evidenced by these four PIMs, the Company has proposed a PIM
portfolio that is designed to balance the upside and downside opportunities for
the Company over the MYRP. The portfolio is designed to balance the per Rate
Year upside reward opportunities of up to approximately \$12 million to the
Company with the per Rate Year downside penalty opportunities of \$12 million.
WHAT ARE THE POLICY GOALS TARGETED BY EACH PIM AND
HOW WILL EACH PROPOSED PIM SUPPORT OR ADVANCE EACH

A. DEC's proposed PIM portfolio is designed to link the utility's revenue or earnings to performance in targeted areas consistent with policy goals, as defined in N.C. Gen. Stat. §62-133.16(a)(8), as well as the policy goals listed

**POLICY GOAL?** 

Q.

in N.C. Gen. Stat. §62-133.16(d)(2) as factors the Commission may consider in reviewing a PBR application. In addition, the Company's proposed PIMs support and advance several policy goals that were discussed and recommended as part of the pre-HB 951 NERP PBR Working Group (which are nearly identical to the policy goals listed in N.C. Gen. Stat. §62-133.16(d)(2)), as well as support certain policy goals and proposed PIM areas suggested by stakeholders during the Company's PIM stakeholder process. Although DEC's initial proposed PIMs do not address all potential policy goals referenced in the foregoing sources, nor all policy goals or PIM proposals advanced by stakeholders, the Company believes that its proposed PIM portfolio collectively reflects the Company's good faith efforts to incorporate diverse, and sometimes competing, stakeholder feedback and propose a thoughtful and measured set of PIMs that are reasonable and in the public interest.

The **Peak Load Reduction PIM** targets and advances operational efficiency and cost-savings per N.C. Gen. Stat. §62-133.16(a)(8) as well as encourages "peak load reduction or efficient use of the system" per N.C. Gen. Stat. §62-133.16(d)(2)a. In addition, this PIM "promotes rate designs that yield peak load reduction or beneficial load shaping" per N.C. Gen. Stat. §62-133.16(d)(2)k., and encourages carbon reductions per N.C. Gen. Stat. §62-133.16(d)(2)f. Peak load management has been a focus for the Company and will continue to play a key role in its efforts to contain the cost of service as beneficial electrification and reliance on solar and other intermittent renewable resources increase. For DEC, the winter peak is a recognized driver for system

resource planning; therefore, system cost savings may be achieved through reduced need for investment. In addition, reduction in winter peak load directly enables the Company to operate with greater operational efficiency, via improvement of the average load factor. Reducing peak load reduces reliance upon peaking generation needed to serve that load and delays the need for new resources, thereby reducing carbon emissions from fossil generation.

This PIM advances these policy goals by encouraging DEC to design and seek approval of innovative dynamic and time-differentiated rate designs, as well as increase customer participation in the existing rates that are designed to reduce system peak load. One reason for strengthening this incentive is that achieving this outcome will require substantial efforts to develop new ways to market and encourage additional customers to enroll in time-differentiated rate designs, particularly among residential customers whose current participation levels in these rates has been minimal. Additionally, while there are currently far greater percentages of General Service and Industrial Customer load enrolled in such rates, the Company plans to continue to explore opportunities to design new dynamic and time-differentiated rates and gain additional customer enrollment, as the proposed PIM would add further incentive to advance these policy goals, and is responsive to recommendations of the NERP PBR Working Group.

The **Low-Income/Affordability PIM** targets and advances cost-savings per N.C. Gen. Stat. §62-133.16(a)(8), as well as reduces low-income energy burdens per N.C. Gen. Stat. §62-133.16(d)(2)d., encourages EE per N.C.

Gen. Stat. §62-133.16(d)(2)e., and encourages carbon reductions per N.C. Gen.
Stat. §62-133.16(d)(2)f. As of February 2020, approximately 29% of DEC and
DEP's residential customers qualify as low-income, with a household income
of 200% of the federal poverty guidelines.8 This PIM advances the listed policy
goals by providing the Company with an incentive to promote voluntary
contributions to the Share the Light Fund, which are used to assist customers
who are struggling to pay their electric bills, and also provides shareholder
funds dedicated to make health and safety repairs to remedy issues that
currently disqualify a significant number of low-income customers from
program participation. 9 A need for health and safety repairs may also disqualify
customers from participating in DEC's Residential Neighborhood Energy Saver
Energy Efficiency program and would also disqualify customers from
participating in DEC's Residential Income-Qualified Energy Efficiency and
Weatherization Assistance for Individuals program. The shareholder
contribution to health and safety funds to be provided by this PIM will help to
complete the non-EE-related work necessary to qualify otherwise ineligible
homes for EE savings, which will provide a more permanent, or at least long-
term benefit, to low-income customers and reduce low-income energy burdens.
The dire need for additional health and safety repair funds is discussed at length
in the Final Report and Recommendations of The North Carolina Low-Income
Affordability Collaborative filed August 12, 2022 in Docket Nos. E-7, Subs

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 <sup>&</sup>lt;sup>8</sup> Final Report and Recommendations of The North Carolina Low-Income Affordability Collaborative filed August 12, 2022 in Docket Nos. E-7, Subs 1213, 1214 and 1187 and E-2, Subs 1219 and 1193 ("LIAC Final Report and Recommendations") at p. 9.
 <sup>9</sup> LIAC Final Report and Recommendations at p. 29, and Appendix G – LIAC, LIAC Proposals at p. 13.

1213, 1214 and 1187 and E-2, Subs 1219 and 1193. The health and safety repairs to be funded by this proposed PIM will enable more energy efficient low-income residences, which will also lower carbon emissions. Support for low-income/affordability as a priority policy goal, and as an area for a PIM, was expressed by several participants in the Company's PIM stakeholder sessions, as well as by the NERP PBR Working Group.

The Reliability PIM targets and advances reliability of electric service per N.C. Gen. Stat. §62-133.16(a)(8) as well as encouraging the policy goal of "maintains adequate levels of reliability . . . " per N.C. Gen. Stat. §62-133.16(d)(2)j. Reliability of service is of great importance to customers. This proposed PIM advances the policy goal of reliability and is responsive to recommendations of the NERP PBR Working Group, as well as stakeholders who participated in the Company's PIM stakeholder sessions in the summer of 2022. These stakeholders expressed support for a downside-only reliability PIM to advance policy goals to maintain current Company reliability levels to guard against those stakeholders' perceived risk that a utility may engage in detrimental cost-cutting in areas that impact reliability during a MYRP. DEC had proposed reliability as a tracking metric in its stakeholder sessions, but subsequently designed and added this proposed PIM based upon broad stakeholder support for a downside-only reliability PIM.

The Renewables Integration and Encouragement PIM targets and advances operational efficiency and cost-savings per N.C. Gen. Stat. §62-133.16(a)(8), as well as encourages DERs per N.C. Gen. Stat. §62-

133.16(d)(2)c., encourages utility-scale renewables and energy storage per N.C. Gen. Stat. §62-133.16(d)(2)b., and encourages carbon reductions per N.C. Gen. Stat. §62-133.16(d)(2)f. While cleaner power generation is a key goal of North Carolina energy policy and the Company, some customers want to reduce the impact of their carbon emissions by choosing a cleaner generation mix now. The proposed PIM furthers these policy goals by strengthening the Company's incentive to integrate DERs located on customer premises and to offer and subscribe customers to cost-competitive and convenient alternative green power programs. The three components of this PIM are described below.

The **DER Integration** Metric A advances Net Energy Metering ("NEM") DER projects, which helps to decrease total generation demand, thereby reducing the need for generation investment and reducing carbon emissions. NEM DERs allow customers to access zero-emitting generation, such as rooftop solar, at their homes and businesses, which reduces their electricity consumption from the grid. There has been a strong focus recently in North Carolina and South Carolina on net metering reform, tying net metering to TOU schedules, and developing new and innovative programs coupling rooftop solar, net metering, TOU, and EE offerings. As discussed in DEC's Carbon Plan, it is critical to carbon dioxide ("CO2") emission reduction efforts to continue exploring innovative net metering program structures that create incentives for customers to participate in net metering. DEC's proposed DER performance incentive encourages efforts to continue growth of DER adoption in the context of expected headwinds that may include cost, supply constraints,

tapering of financial incentives, and regulatory uncertainty (*i.e.*, the Commission's pending decisions in Docket Nos. E-7, Sub 1214; E-2, Sub 1219; E-2, Sub 1076; and E-100, Sub 180, and Docket No. E-7, Sub 1261). This component of the PIM advances these policy goals and is responsive to recommendations of the NERP PBR Working Group, as well as some stakeholders who participated in the Company's PIM stakeholder sessions in the summer of 2022, which expressed support for a DER-related PIM.

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The Large Customer Renewable Program Encouragement Metric B supports many large commercial and industrial ("C&I") customers, educational institutions, and local governments who have Environmental, Social, and Governance goals or other clean energy goals and are increasingly seeking access to renewable energy and programs as part of their business and operations. In addition, some large C&I customers are increasingly making access to clean energy a criterion as they consider expanding or relocating their operations. This component of the PIM provides an incentive for the Company to design, obtain regulatory approval of, and subscribe large customers to renewable programs that are responsive to and attractive to these customers' needs. This component of the PIM is proposed in response to feedback received from large customer representatives in the Company's summer 2022 PIM stakeholder process. In addition to advancing the policy goals discussed above, successfully developing and subscribing customers to new renewables programs supports customer satisfaction.

The Residential Customer Shared Solar Program Encouragement
Metric C encourages increased options for residential customers to have access
to additional clean energy resources and reduce carbon emissions. Some
residential customers want power from a cleaner mix of resources but seek ar
option other than a DER on their premises. Alternative green power options
such as residential shared solar programs, help residential customers achieve
their clean energy goals.

This component of the PIM provides an incentive for the Company to design, obtain regulatory approval of, and subscribe residential customers to voluntary shared solar programs that are responsive to and attractive to these customers' needs while also providing benefits to non-participating customers. In addition to advancing the policy goals discussed above, successfully developing and subscribing residential customers to new shared solar programs supports customer satisfaction.

1	Q.	PLEASE EXPLAIN THE DESIGN OF THE PROPOSED PEAK LOAD
2		REDUCTION PIM, INCLUDING THE METRICS AND TARGETS AND
3		PROPOSED PIM REWARDS OR PENALTIES.

A.

The performance metric for the **Peak Load Reduction PIM** is the estimated winter peak kW reduction associated with customer enrollment in the Company's dynamic and time-differentiated rates. PBR Policy Panel Exhibit 1 provides the design detail for the Peak Load Reduction PIM, and the calculation of the estimated winter peak reduction is based upon approved inputs utilized in the Company's DSM/EE Cost Recovery Mechanism to value the utility system benefits from reducing peak capacity. The PIM is prospective in nature and will only include and recognize peak load reductions from incremental customer participation and associated kW reductions after approval of this PIM by the Commission, including any new applicable rate designs approved by the Commission during the MYRP Plan Period. Results will be reported annually after each Rate Year for program enrollment as of December 31.

This PIM is upside-only to the Company and is designed as a shared savings-like structure to distribute the total joint benefit created by the peak reduction efforts. PBR Policy Panel Exhibit 1 shows an example calculation demonstrating the estimated peak reduction due to the Company's dynamic and time-differentiated rates. Customers will retain 70% of the joint system benefit realized through long-term avoided system costs, which preserves low rates over time. The Company will recover 30% of the calculated joint system benefit as a reward, which is appropriate to provide a meaningful incentive for DEC to

develop innovative dynamic and time-differentiated rates and drive customer
enrollment in these rates, which otherwise would reduce utility earnings and
have the potential to erode the current DSM/EE incentive. Based upon assumed
aggressive customer adoption of existing and future rate designs consistent with
the Company's Carbon Plan modeling, the estimated potential PIM reward
value (joint benefit recognition) by rate year is:

Rate Year 1: \$0.6 million Rate Year 2: \$1.1 million Rate Year 3: \$1.6 million

Table 1 in PBR Policy Panel Exhibit 1, shows an illustrative calculation of incentive value for a range for incremental customer participation. To the extent that additional new rate designs are approved and included within this PIM and/or additional customers enroll in existing or future new PIM-applicable rates after the date this PIM is approved, then the maximum potential PIM reward could change. Conversely, if fewer customers than assumed in this calculation enroll in applicable rate designs, then the potential PIM reward value would be less.

- 18 Q. PLEASE EXPLAIN THE DESIGN OF THE PROPOSED LOW19 INCOME/AFFORDABILITY PIM, INCLUDING THE METRICS AND
  20 TARGETS AND PROPOSED PIM REWARDS OR PENALTIES.
- 21 A. The performance metric for the **Low-Income/Affordability PIM** is a graduated shareholder contribution/bonus matching contribution structure that is tied to the Rate Year amount of voluntary contributions to the Company's Share the Light Fund, which provides bill paying assistance to customers in need. Customers, Company employees, or others who contribute to the Share

the Light Fund can round up their bill to the next closest dollar, set up a recurring donation, or make a one-time donation. The Duke Energy Foundation matches contributions to the Share the Light Fund from customers, employees, or others within DEC North Carolina dollar-for-dollar up to \$375,000, and this Foundation match is unchanged and unrelated to the proposed PIM.

As discussed in PBR Policy Panel Exhibit 2, the PIM is downside-only to the Company and structured so that shareholders would pay a maximum \$3 million contribution and a minimum of \$1.9 million to fund low-income residential health and safety repairs. As shown in Table 1 in PBR Policy Panel Exhibit 2, the target and shareholder contribution structure is based upon a formula of \$3 million – [0.75 x in-year Share the Light Fund contributions], with a bonus dollar-for-dollar shareholder matching contribution for in-year contributions to the Share the Light Fund over \$1.5 million (up to a \$1.5 million shareholder bonus matching maximum). Similar to the existing process for how DEC utilizes a third-party administrator to distribute similar funds as part of prior Helping Home Fund ("HHF") commitments resulting from previous regulatory proceedings, DEC plans to utilize a third party to administer the distribution of shareholder funds available pursuant to this PIM to weatherization trade allies to be used for health and safety repairs.

This PIM gives the Company added incentive to promote and encourage contributions to the Share the Light Fund to benefit customers in need, while providing a corresponding shareholder contribution to address needed health and safety repairs to address issues that currently prevent many low-income

residences from qualifying for weatherization or other EE improvements.
Because the shareholder contributions under this proposed PIM would not flow
to all customers, but only to low-income residences through weatherization
trade allies to implement health and safety repairs, the Company would not
include any shareholder payments from this PIM in the PIM rider. The
Company does propose to count the downside-only amounts as part of the 1%
revenue requirement PIMs cap as it represents an obligation of the Company to
advance important policy goals as part of its proposed PIM portfolio.

A.

# 9 Q. PLEASE EXPLAIN THE DESIGN OF THE PROPOSED RELIABILITY 10 PIM, INCLUDING THE METRICS AND TARGETS AND PROPOSED 11 PIM REWARDS OR PENALTIES.

The performance metric for the **Reliability PIM** is calendar year SAIDI, excluding MEDs. The proposed incentive structure is detailed in PBR Policy Panel Exhibit 3 and is designed to establish penalties for failure to maintain expected reliability as measured by SAIDI. This PIM provides a downside-only penalty structure with graduated penalties for performance above (*i.e.*, worse than) SAIDI performance thresholds based upon the five-year historical average SAIDI for calendar years 2018-2022. As further explained in PBR Policy Panel Exhibit 3, the proposed three-tiered performance financial penalty is based upon exceeding the upper bound of an 80% confidence interval for the five-year historical average plus expected increase in outages attributable to increased grid work during the MYRP. Final 2022 SAIDI performance will not

be known until sometime in early 2023 to establish the final five-year historical SAIDI average benchmark and tiers.

Table 1 in PBR Policy Panel Exhibit 3 illustrates how the PIM penalty structure would apply using estimated 2022 SAIDI data through the end of September 2022 as the basis for the three tier target levels. This PIM provides a Tier 1 penalty of \$1.5 million for exceeding the SAIDI historic five-year average (2018-2022) by twenty minutes; a Tier 2 penalty of \$3 million for exceeding the SAIDI historic five-year average (2018-2022) by forty minutes; and a Tier 3 penalty of \$9 million for exceeding the SAIDI historic five-year average (2018-2022) by sixty minutes. Again, the individual tier SAIDI thresholds are subject to change once the SAIDI historic five-year average is known.

- Q. PLEASE EXPLAIN THE DESIGN OF THE PROPOSED RENEWABLES INTEGRATION AND ENCOURAGEMENT PIM, INCLUDING THE METRICS AND TARGETS AND PROPOSED PIM REWARDS OR PENALTIES.
- 17 A. As I previously noted, the **Renewables Integration and Encouragement PIM**18 consists of three components.

The **DER Integration** Metric A is an upside-only metric, which provides graduated rewards to the Company for exceeding targets for the number of net-metered DER customers interconnected to the DEC system. The baseline performance thresholds will be based upon historical three-year average interconnections for the 2020, 2021, and 2022 calendar years and will

be fixed for the duration of the MYRP. The DER Integration Metric A proposed performance metric is the total number of NEM projects connected by DEC during each Rate Year. PBR Policy Panel Exhibit 4 provides the design detail for Metric A and the baseline performance thresholds against which DEC's upside-only reward will be measured. DEC is proposing a three-tiered incentive metric. As noted in PBR Policy Panel Exhibit 4, there are two relevant matters pending before the Commission whose regulatory outcomes could have an impact upon the potential number of new net-metered interconnections to be achieved. Accordingly, we would look to adjust the targeted performance thresholds once the outcome of those matters are resolved.

As noted in PBR Policy Panel Exhibit 4, the three-year historic average number of net-metered interconnections for calendar year 2020-2022 is estimated to be 3,672. Importantly, however, the actual three-year historical average number of interconnections will not be known until after 2022 year-end (to be provided in early 2023) and is, therefore, subject to change. For the proposed targets, the Tier 1 performance threshold represents a 5% increase from the estimated three-year historical average number of annual net-metered interconnections and provides a performance reward of \$1.5 million. The Tier 2 performance threshold represents a 15% increase from the estimated three-year historical average number of annual net-metered interconnections and provides a performance reward of \$3 million. The Tier 3 performance threshold represents a 25% increase from the estimated three-year historical average number of annual net-metered interconnections and provides a performance threshold

reward of \$6 million. Table 1 in PBR Policy Panel Exhibit 4 illustrates these performance thresholds and rewards.

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The Large Customer Renewable Program Encouragement Metric B is an upside-only metric that establishes tiered rewards for the Company based upon the cumulative share of commercial and industrial customer renewables program capacity subscribed by eligible customers for new C&I renewable customer programs approved by the Commission subsequent to the filing of this PBR Application. This metric provides an incentive for DEC to design, obtain approval of, and subscribe customers to new renewable programs that meet these customers' desires for access to clean energy resources. The graduated performance thresholds provide associated financial rewards to the Company for meeting or exceeding a cumulative share of new renewable program capacity subscribed by eligible commercial and industrial customers. As provided in PBR Policy Panel Exhibit 4, Tier 1 provides a \$1 million reward if the programs are cumulatively subscribed at or above 30% of program capacity in a rate year; Tier 2 provides a \$2 million reward if the programs are cumulatively subscribed at or above 50% of program capacity in a Rate Year; and Tier 3 provides a \$3 million reward if the programs are cumulatively subscribed at or above 70% of program capacity in a Rate Year. Performance will be assessed each Rate Year, independent of preceding Rate Years (e.g., Tier 1 financial reward could be earned in consecutive years, if cumulative subscription rate achieved is between 30% and 50%).

The Residential Customer Shared Solar Program Encouragement
Metric C is an upside-only metric that establishes tiered rewards for the
Company based upon the cumulative share of residential customer shared solar
program capacity subscribed to by eligible customers for new residential shared
solar customer programs approved by the Commission subsequent to the filing
of this PBR Application. This metric provides an incentive for DEC to design,
obtain approval of, and subscribe residential customers to new shared solar
programs that meet these customers' desires for access to clean energy
resources. The graduated performance thresholds provide associated financial
rewards to the Company for meeting or exceeding a cumulative share of new
renewable program capacity subscribed. As provided in PBR Policy Panel
Exhibit 4, Tier 1 provides a \$500,000 reward if the programs are cumulatively
subscribed at or above 30% of program capacity in a Rate Year; Tier 2 provides
a \$1 million reward if the programs are cumulatively subscribed at or above
50% of program capacity in a Rate Year; and Tier 3 provides a \$1.5 million
reward if the programs are cumulatively subscribed at or above 70% of program
capacity in a Rate Year. Performance will be assessed each Rate Year,
independent of preceding Rate Years (e.g., Tier 1 financial reward could be
earned in consecutive years, if cumulative subscription rate achieved is between
30% and 50%).

# 1 Q. WHAT ARE THE MAXIMUM PIM DOWNSIDE AND UPSIDE 2 OPPORTUNITIES UNDER THE COMPANY'S PROPOSAL?

A. The Company's proposed maximum per Rate Year PIM penalty is \$9 million for the Reliability PIM (for Tier 3) and the maximum per Rate Year total shareholder contributions for the Low-Income/Affordability PIM is \$3 million, which again the Company proposes to count as downside toward the 1% revenue requirement PIMs cap although shareholder dollars would fund low-income health and safety repairs instead of being returned to customers through the PIM rider; for a total maximum downside PIM amount of \$12 million per Rate Year.

The Company's estimated potential Peak Load Reduction PIM reward value is approximately \$0.6 million in Rate Year 1, approximately \$1.1 million in Rate Year 2, and approximately \$1.6 million in Rate Year 3, although as I noted earlier, this estimate is based upon aggressive assumed customer adoption of existing and future rate designs consistent with the Company's Carbon Plan, and the reward value could increase or decrease depending on the number of new customers enrolled in applicable rate designs. The maximum per Rate Year PIM reward for the Renewables Integration and Encouragement PIM (all three components) is \$10.5 million. Accordingly, the maximum PIM reward opportunity is approximately \$12 million per Rate Year.

1	Q.	PIMS FOR DSM AND EE ARE COMMON IN OTHER JURISDICTIONS
2		AND WERE DISCUSSED IN THE NERP PROCESS AND THE
3		COMPANY'S STAKEHOLDER SESSIONS. WHY ISN'T DEC
4		PROPOSING A DSM/EE PIM IN THIS PROCEEDING?
5	A.	DEC is proud of its DSM/EE achievements, having been consistently
6		recognized as an EE savings leader among Southeast utilities. Stakeholder
7		engagement through the long-standing DSM/EE Collaborative has been

DEC's DSM/EE Mechanism, which the Commission approved on October 20, 2020, in Docket No. E-7, Sub 1032 and which went into effect January 1, 2022, effectively is a PIM through its incentive and penalty structure. The DSM/EE Mechanism features a Portfolio Performance Incentive ("PPI") based on the sharing of net utility system benefits achieved through the energy and capacity savings from DSM/EE programs in the aggregate. The DSM/EE Mechanism also includes a Program Return Incentive ("PRI"), which is a payment to the Company for adopting and implementing programs that fail to pass the Utility Cost Test but are approved by the Commission due to the societal benefit they provide, such as low-income programs. Finally, the DSM/EE Mechanism establishes an added incentive of \$500,000 in any year during the 2022-2025 period that DEC achieves annual energy savings of 1% of the prior year's system retail electricity sales. During that same period, if the Company fails to achieve annual energy savings of 0.5% of retail sales, net of

integral in developing and refining DSM/EE programs in the Carolinas over the

past fifteen years.

1	sales associated with customers opting out of the Company's EE programs, that
2	Company will reduce its EE revenue requirement by \$500,000.

A.

In short, the Company's DSM/EE cost recovery mechanism already features a refined, established and effective incentive mechanism for DSM/EE that motivates the Company to offer a high-performing and cost-effective portfolio of programs. Furthermore, to avoid double recovery, N.C. Gen. Stat. §62-133.16(c)(4) provides that any DSM/EE incentives are excluded from the 1% PIMs cap and shall continue to be recovered through the DSM/EE rider. As such, the Company has not proposed an additional DSM/EE PIM as part of the PIMs proposed in this PBR proceeding.

# 11 Q. HOW WILL THE PROPOSED PENALTY OR REWARD FOR EACH 12 PIM MINIMIZE ANY DUPLICATION OF OTHER REWARDS OR 13 PENALTIES CREATED BY OTHER RATEMAKING MECHANISMS, 14 INCLUDING DISTINGUISHING ACHIEVEMENT OF ANY DSM/EE 15 PORTFOLIO INCENTIVES?

In accordance with Commission Rule R1-17B(d)(3)e.iv., DEC does not have any rewards or penalties created by other ratemaking mechanisms that would overlap with any of its proposed PIMs, and, therefore, there would not be any duplication. Again, the Company has not proposed any DSM/EE PIMs, as these programs have an established performance incentive mechanism.

1	Q.	WHAT ARE THE COMPANY'S PROJECTED COSTS TO BE
2		INCURRED, ALONG WITH INFORMATION ON HOW THE
3		COMPANY INTENDS TO EVALUATE, MEASURE, AND VERIFY
4		COMPLIANCE OR ACHIEVEMENT WITH ITS PROPOSED PIMS?
5	A.	PBR Policy Panel Exhibits 1 through 4 provide cost projections to support the
6		Company's plans to support or advance the policy goals through each proposed
7		PIM, including the proposed resources. In most cases, the Company proposes
8		to utilize Company personnel and resources to evaluate, measure, and verify
9		results for all PIMs. As discussed in PBR Policy Panel Exhibit 1, DEC does
10		propose to use a third-party vendor to review the methodology utilized to
11		calculate the kW reduction associated with the Peak Load Reduction PIM, but
12		will perform the evaluation, measurement and verification with internal
13		resources. As explained in PBR Policy Panel Exhibit 2, as part of its support for
14		the Low-Income/Affordability PIM, DEC proposes to utilize a third party to
15		administer the shareholder funds available pursuant to this PIM to
16		weatherization trade allies to be used for health and safety repairs similar to the
17		existing process for how DEC utilizes a third party administrator to distribute
18		similar funds as part of prior HHF commitments resulting from prior regulatory
19		proceedings. As with the existing HHF administration process, the vendor
20		administrative costs will be established not to exceed 10% of the shareholder
21		funds provided for health and safety repairs.
22		With regard to the proposed PIMs for Reliability, DER Integration
23		Metric A, Large Customer Renewable Program Encouragement Metric B, and

Residential Customer Shared Solar Program Encouragement Metric C, the Company has internal resources to track and report key components of the metrics for each PIM and, therefore, projects at this time to incur minimal incremental costs associated with the respective PIM. As provided in PBR Policy Panel Exhibits 1 and 2, the Company anticipates incurring incremental marketing costs to promote the programs included in the Peak Load Reduction and Low-Income/Affordability PIMs.

A.

In addition, the Company plans to utilize Duke Energy's IT department to develop a public web-based PIM dashboard which will allow the Commission, intervenors, and the public at large to view DEC's progress toward the PIM metrics and proposed tracking metrics. The PIM dashboard has a capital cost estimate of \$540,000, with estimated annual O&M costs of approximately \$100,000. The Company proposes to allocate the costs of the PIM dashboard based upon the number of North Carolina Retail customers – 56.77% to DEC and 43.23% to DEP, as the PIM dashboard will support both DEC and DEP. Incremental O&M costs are proposed for deferral and future recovery as described by Witness Quynh Bowman in her testimony.

# Q. DOES YOUR TESTIMONY ADDRESS THE ESTIMATED IMPACT TO THE ANNUAL AND TOTAL REVENUE REQUIREMENTS THAT WOULD RESULT FROM THE PROPOSED PIMS?

No. The estimated impact to the Company's annual and total revenue requirements that would result from supporting or advancing the policy goals through the proposed PIMs is addressed in the testimony of Witness Taylor.

1	Q.	PLEASE	DESC	RIBE	THE	TRACK	ING N	METRICS	THAT	THE
2		COMPAN	Y IS	PRO	POSING	G AND	THE	BASIS	FOR	THEIR
3		SELECTIO	ON.							

A. Pursuant to Commission Rule R1-17B(d)(4), DEC is proposing three tracking metrics, which were selected to quantitatively measure and monitor outcomes and/or utility performance that, although not tied to financial incentives or penalties, address the Company's progress in furthering important policy goals. These tracking metrics can also provide useful information in evaluating potential future PIMs.

The first is a customer service tracking metric, which will provide a quarterly update during the Rate Year of the rolling 12-month call center answer rate and the average speed of answer. The Company tracks this data on a system basis, so the information will be reported on a consolidated DEC basis, not DEC North Carolina only. This is an appropriate metric to include as a tracking metric because customers often communicate with the Company about service and billing issues by telephone. Also, it allows greater public access to the data and supports maintaining adequate levels of customer service per N.C. Gen. Stat. §62-133.16(d)(2)j. The Company currently reports and will continue to report this information to the Commission pursuant to Commission Rule R8-4A, which was adopted by the Commission's March 9, 2015 *Order Adopting New Service Quality Rules for Electric Utilities*.

Next, we propose a CO<sub>2</sub> emissions tracking metric, which will report progress toward compliance with the CO<sub>2</sub> reduction targets of HB 951 and the

Commission's Carbon Plan, on a frequency as established by the Commission in Docket No. E-100, Sub 179. Because DEC and DEP's systems are jointly dispatched, and the HB 951 CO<sub>2</sub> reduction goals are joint between the two utilities, the Company will track and report the combined DEC and DEP reduction in CO<sub>2</sub> emissions by percentage as compared to the baseline 2005 emission levels. Progress toward the HB 951 CO<sub>2</sub> reduction provisions is a matter of keen interest for North Carolina and making this data available in a tracking metric can provide broader public access. This tracking metric also supports encouraging carbon reductions per N.C. Gen. Stat. §62-133.16(d)(2)f.

Finally, we propose a tracking metric to report beneficial electrification from estimated incremental load from EVs. N.C. Gen. Stat. §62-133.16(c)(2) contains a provision to encourage EVs by excluding EV charging from the decoupling mechanism, as is discussed in Witness Taylor's testimony. In addition, Governor Cooper's Executive Order 246, signed on January 7, 2022, sets goals to increase the number of zero emission vehicles in our state by 2030. This tracking metric also supports encouraging beneficial electrification, including EVs, per N.C. Gen. Stat. §62-133.16(d)(2)g. Accordingly, this tracking metric will provide important data about an area with material policy interest.

In conclusion, and consistent with its approach for proposing its initial PIMs, the Company has proposed these three tracking metrics to address important policy goals as part of a deliberate approach to the number of tracking metrics in its initial PBR Application.

# 1 Q. WHY SHOULD THE COMMISSION ADOPT THE COMPANY'S

# PROPOSED PIMS AND TRACKING METRICS?

A. As discussed above, the Company's proposed PIMs and tracking metrics are consistent with the guidelines in HB 951. Consistent with the guidelines provided in N.C. Gen. Stat. §62-133.16(c)(3), the Company's four proposed PIMs are targeted, clearly defined, capable of being measured with a defined performance metric, and solely or primarily within DEC's control. The incentive provisions or structures are based upon fixed financial rewards, and the Peak Load Reduction PIM has a shared savings-like structure, consistent with the guidelines provided in N.C. Gen. Stat. §62-133.16(c)(5). As discussed in Witness Taylor's testimony, the total of all potential PIM rewards or penalties is well within the 1% revenue requirement cap provided for in N.C. Gen. Stat. §62-133.16(c)(4). All the proposed PIMs are consistent with policy goals as defined in N.C. Gen. Stat. §62-133.16(a)(8) and the PBR plan review criteria identified in N.C. Gen. Stat. §62-133.16(d)(2).

DEC's choice of focus areas for the proposed PIMs was also informed by Duke Energy's participation in the pre-HB 951 NERP process where several PIMs were recommended; intervenor comments in the Commission's PBR rulemaking process; stakeholder feedback during Low-Income Affordability Collaborative stakeholder process; discussions during the PIMs stakeholder sessions convened by the Company in the summer of 2022; and a review of approved PIMs in other jurisdictions. In summary, the PIMs developed and proposed in this initial PBR Application reflect diverse stakeholder input and

reflect a measured and thoughtful approach as the Company, interested stakeholders, and this Commission gain experience and obtain information on best practices to track certain information so that incentives are properly aligned with policy goals and consistently and correctly tracked.

Similarly, other jurisdictions have taken a deliberate and conservative approach in adopting PIMs in the initial years of PBR plans. As explained in the Company's filed PBR Rulemaking comments, this deliberate approach is appropriate as DEC and stakeholders tackle novel issues, gain experience with new legislative and regulatory tools, and implement lessons learned. As the NERP PBR group recommended, it also allows the Commission and utilities to adapt as policy goals and objectives change over time.

In summary of my testimony regarding the policy goals advanced by the Company's proposed PIMs and tracking metrics, of the 11 listed public policy goals that the Commission may consider in evaluating a PBR application under N.C. Gen. Stat. §62-133.16(d)(2), the Company's proposed PIMs and tracking metrics are responsive to 9 of the 11 (subparts a., b., c., d., e., f., g., j., and k.):

- a. Encourages peak load reduction or efficient use of the system.
- b. Encourages utility-scale renewable energy and storage.
- c. Encourages DERs.

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- d. Reduces low-income energy burdens.
- e. Encourages energy efficiency.
- f. Encourages carbon reductions.
- 23 g. Encourages beneficial electrification, including electric vehicles.

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h	Sunnorts	equify in	contracting.
11.	Dupports	equity iii	commucaniz.

- i. Promotes resilience and security of the electric grid.
- j. Maintains adequate levels of reliability and customer service.
- k. Promotes rate designs that yield peak load reduction or beneficial load-shaping.

Although DEC has not proposed a PIM or tracking metric in the area of supporting equity in contracting, the Company's reporting and overall efforts in support of the Hire North Carolina Rule, Commission Rule R25-1, advance such a policy goal. Similarly, although DEC has not proposed a PIM or tracking metric in the area of promoting resiliency and security of the electric grid, the Company has proposed significant transmission and distribution investments in its PBR Application (which are discussed in the testimony and exhibits of Witnesses Maley and Guyton) that will promote resiliency and security of the electric grid.

The Company's proposed PIMs address significant policy goals and provide meaningful financial incentives to encourage utility performance in areas of shared interest. The proposed PIM rewards and penalties are reasonable and appropriate, in addition to being consistent with Company's deliberate approach to PIMs in its first PBR Application. In addition, the Company has proposed a PIM portfolio in which the potential PIM rewards for performance are reasonably balanced against potential PIM penalties or downside based upon performance. The Company's proposal would balance upside reward opportunities of up to approximately \$12 million to the Company with the

downside opportunities of up to \$12 million. The Company has proposed tiers of rewards and penalties in most of its PIMs to encourage "stretch" behavior and refine the available rewards or penalties to targeted outcome results. The exception to this tiered approach is the Peak Load Reduction PIM which is based upon a shared savings-like structure. Accordingly, the Company believes that its proposed PIMs and incentive structures are reasonable and should be approved by the Commission.

Although the Company's proposed PIMs have been offered in response to diverse stakeholder input, and the Company believes they are reasonable and appropriate under the framework of HB 951, DEC notes that the stakeholder views on such important policy goals are certainly not unanimous and in some instances are contradictory. DEC expects that the rate case process will provide opportunities for additional exchanges of information among intervenors and the Company about potential PIMs which may provide opportunities for additional engagement and alignment.

# 16 Q. DOES THIS CONCLUDE THE PANEL'S PRE-FILED DIRECT 17 TESTIMONY?

18 A. Yes.

# **Peak Load Reduction PIM**

### Metric

The proposed metric for the peak load reduction PIM is the <u>estimated Winter peak kW reduction</u> <u>associated with customer enrollment in the Company's dynamic and time-differentiated rates</u>, including additional rates proposed and approved in the future.

Proposed metric would be calculated for each applicable rate as:

Total enrolled customers (as of Dec. 31) less participants enrolled at the time of PIM approval

- x Average expected Winter peak reduction per enrolled customer (kW)
- = Estimated Winter peak kW reduction
- x Utility system benefit (\$ / kW) based on approved inputs from EE/DSM Cost Recovery Mechanism
- = Total Joint System Benefit
- x Company allocation of Joint Benefit
- = Company incentive value

Estimated Winter peak reduction will be reported annually after the end of each Rate Year, calculated based on total enrollment in relevant rate programs as of December 31.

# Eligible programs

Calculation will only include and recognize peak load reductions from incremental customer participation and associated deemed kW reductions after approval of the PIM by the Commission, including any new applicable rate designs approved by the Commission during the MYRP. Eligible rate programs include rates identified at the time of establishing the PIM and any new time-differentiated or dynamic rates that are identified for inclusion at the time of Commission approval.

Presently, there are limited residential eligible rate programs (i.e. RSTC and RETC) in DEC North Carolina. There are also existing non-residential time differentiated rates (i.e. SGSTC and OPT-V), but given the complexity associated with determining a deemed savings from such a heterogeneous customer group, the impact of any estimated incremental participation will be modeled and vetted on a case-by-case basis at the time of calculating the proposed incentive.

At the time of seeking approval for any additional rates that the Company identifies for inclusion in the performance metric calculation, the Company shall provide a proposed initial kW savings reduction to be utilized and supporting documentation/rationale.

# **Incentive calculation**

Based on a sharing of utility system savings structure, in each year during the MYRP, customers will retain 70% of the calculated joint benefit resulting from estimated Winter peak kW reduction. The Company can earn a payment equal to 30% of the calculated joint benefit resulting from estimated Winter peak kW reduction. Any earned payment would be recovered through the PIM rider established by the Commission upon authorization of the MYRP.

For existing eligible rate programs (RSTC and RETC), the average expected Winter peak reduction per enrolled customer is approximately ~0.21-0.31 kW.

Based on approved inputs utilized in the Company's DSM/EE Cost Recovery Mechanism, as applied to the vintage year that aligns with the PIM period in the most recently approved DSM/EE rider filing, the current value of the utility system benefit is approximately \$80 to \$90 per kW of Winter peak reduction.

Table 1: Illustrative calculation of incentive value for range of incremental customer participation in R TOU CPP time-differentiated rate program

Customer	Approximate
enrollment	incentive value
15,000	\$100,000
75,000	\$500,000
150,000	\$1,000,000
200,000	\$1,300,000
275,000	\$1,800,000

Projection of costs to be incurred and proposed resources (labor, contractors, materials, etc.) per Commission Rule R1-17B(d)(3)d.

The required resources to support advancement of this policy goal are limited to marketing and billing system efforts associated with approved dynamic and time-differentiated rate programs, as well as efforts to develop and gain approval of additional dynamic and time-differentiated rates.

Additional costs associated with the Peak Load Reduction PIM include:

- Implementation of participation tracking (estimated to be ~\$100-200k on approval of PIM)
- Evaluation, measurement, and verification (EM&V) costs associated with each time differentiated or dynamic rate included in the PIM calculation, to update impacts for future calculations (estimated to be ~\$50-\$200k per new rate design)
- Incremental marketing costs for rate offerings (estimated to be ~\$50-200k per year)

# Approach for evaluation, measurement, and verification

The specific metric to assess performance will be the <u>total number of enrolled customers in eligible</u> rate programs as of December 31 occurring during the Rate Year.

The Company will use internal labor to analyze customer data, and an independent third-party for validation. Third-party review will also include approach and methodology to determine the value of savings. Additional EM&V sampling will occur at the point in time when there is a sufficient participant pool to yield statistically significant results.

# Low-Income/Affordability PIM

### Metric

The proposed metric for the low-income affordability PIM is <u>annual Rate Year contributions (\$)</u> to the DEC-NC Share the Light Fund program to support low-income customers through bill <u>paying assistance</u>. Results will be reported annually after the end of each Rate Year.

# **Eligible contributions**

The metric will include all voluntary contributions from customers, Company employees, and third parties to the existing DEC-NC Share the Light Fund.

All other contributions by the Company or its Foundation, including the current matching program (up to \$375,000 under the current program) would not be included in the metric.

# PIM description

This PIM gives the Company added incentive to promote and encourage contributions to the Share the Light Fund to benefit customers in need, while providing a corresponding shareholder contribution to address needed health and safety repairs that currently prevent many low-income residences from qualifying for weatherization or other energy efficiency ("EE") improvements.

The Company will make structured shareholder contributions to fund residential health and safety initiatives to enable low-income customer participation in weatherization and EE programs based upon the level of Rate Year contributions to the DEC-NC Share the Light Fund. Shareholder contributions are classified as either (a) **shareholder contribution**, or (b) **bonus shareholder matching**, with no differentiation of use for funds based on the contribution classification. The PIM structure incentivizes the Company to encourage Share the Light Fund contributions.

This PIM is "downside-only" to the Company. The maximum total of per Rate Year shareholder contributions pursuant to this PIM is \$3.0 million, with a minimum total shareholder contribution of \$1.9 million.

Formulas / approach for calculating structured contributions are as follows:

- **Shareholder contribution** = \$3.0 million [0.75 x eligible contributions]
- **Bonus shareholder matching** is dollar-for-dollar for eligible contributions over \$1.5 million (up to \$1.5 million bonus shareholder matching maximum)

# For example:

- A) If eligible contributions to the Company's Share the Light Fund in a given Rate Year equal \$360,000, the:
- **shareholder contribution** would be \$2,730,000: (3,000,000 (360,000 \* 75%))
- bonus shareholder matching would be \$0

- B) If eligible contributions to the Company's Share the Light Fund in a given rate year equal \$1,875,000, the:
  - **shareholder contribution** would be \$1,593,750: (3,000,000 (1,875,000 \* 75%))
  - **bonus shareholder matching** would be \$375,000

The existing Foundation matching program is unchanged and unrelated to this PIM. Eligible contributions to the DEC-NC Share the Light Fund (and associated Foundation matching) will continue to directly fund programming for bill assistance to low-income customers.

Structured contributions associated with the PIM (both **shareholder contribution** and **bonus shareholder matching)** will to be used to fund residential health and safety initiatives to enable low-income customer participation in weatherization and EE programs.

Because the shareholder contribution structure of this proposed PIM would not flow to all customers, but only to low-income residences through weatherization trade allies to implement needed health and safety repairs, the Company would not include any shareholder payments from this PIM in the PIM rider; the Company does propose, however, to count the "downside-only" amounts as part of the 1% revenue requirement PIMs cap as it represents an obligation of the Company to advance important policy goals as part of its proposed PIM portfolio.

Table 1: Illustrative calculation of shareholder contributions by the Company, for range of Rate Year contributions to the Share the Light Fund

Structured PIM contributions (for health and safety renairs)

Rate Year		repa	Total funding	
contributions to Share the Light Fund	Foundation matching (existing system)	matching Shareholder shareholder		
\$0	\$0	\$3,000,000	\$0	\$3,000,000
\$200,000	\$200,000	\$2,850,000	\$0	\$3,250,000
\$400,000	\$375,000	\$2,700,000	\$0	\$3,475,000
\$600,000	\$375,000	\$2,550,000	\$0	\$3,525,000
\$800,000	\$375,000	\$2,400,000	\$0	\$3,575,000
\$1,000,000	\$375,000	\$2,250,000	\$0	\$3,625,000
\$1,200,000	\$375,000	\$2,100,000	\$0	\$3,675,000
\$1,400,000	\$375,000	\$1,950,000	\$0	\$3,725,000
\$1,600,000	\$375,000	\$1,800,000	\$100,000	\$3,875,000
\$1,800,000	\$375,000	\$1,650,000	\$300,000	\$4,125,000
\$2,000,000	\$375,000	\$1,500,000	\$500,000	\$4,375,000

Projection of costs to be incurred and proposed resources (labor, contractors, materials, etc.) per Commission Rule R1-17B(d)(3)d.

The required resources to support advancement of this policy goal include marketing efforts associated with the Share the Light Fund program. The Company estimates an incremental \$15,000 in annual marketing costs for the Share the Light Fund as part of this PIM.

In addition, similar to the existing processes utilized as a result of previous regulatory proceedings involving the Company, a third-party administrator will be utilized to distribute funds consistent with the distribution of similar funds as part of prior Helping Home Fund ("HHF") commitments. The Company plans to utilize a third party to administer the shareholder funds available pursuant to this PIM to weatherization trade allies to be used for health and safety repairs. As with the existing HHF administration process, the vendor administrative costs will be established not to exceed 10% of the shareholder funds provided for health and safety repairs.

Additional incremental costs are expected to be minimal at this point, as internal program management resources track Share the Light Fund contributions.

# Approach for evaluation, measurement, and verification

The Company has existing internal resources and systems to track contributions to the Share the Light Fund and will use these existing resources to evaluate, measure, and verify compliance with or achievement of this PIM's terms.

# Reliability PIM

### Metric

The proposed metric for the reliability PIM is system average interruption duration index ("SAIDI"), excluding major event days ("MEDs"). Results will be reported annually after the end of each Rate Year, for performance during the 12-month period ending on December 31.

# Illustrative thresholds (pending update for 2022 data)

# Performance threshold

SAIDI 5-year historic average (2018-2022) No penalty for SAIDI below Tier 1 threshold	180*
SAIDI threshold for Tier 1 penalty  Financial penalty if SAIDI above threshold value	<b>200</b> * \$1.5M
SAIDI threshold for Tier 2 penalty Financial penalty if SAIDI above threshold value	220* \$3.0M
SAIDI threshold for Tier 3 penalty Financial penalty if SAIDI above threshold value	<b>240</b> * \$9.0M

**Note:** \* Thresholds and tiers are based on expected 5-year average SAIDI (excluding MEDs) for 2018-22 using currently available data. Thresholds and tiers are to be recalculated in early 2023 with complete data, using methodology described in this exhibit.

# PIM description

This PIM holds DEC accountable to maintain service reliability as measured by SAIDI. The Company will be required to return a penalty to customers if SAIDI performance exceeds established thresholds. Potential penalties are tiered to increase for cases where performance exceeds historic average performance by escalating amounts. Any calculated penalty would be returned to customers through the PIM rider established by the Commission upon authorization of the MYRP.

Illustrative thresholds for penalties are based upon historic averages (2018-2022) adjusted for statistical confidence levels and increased outages due to additional grid work that is expected during the MYRP. Specifically, thresholds were calculated as:

5-year historic average for 2018-2022 is expected to be 180 minutes (based on data ending September 2022)

• For the purpose of this filing, the 2018-2022 five-year average SAIDI is the most recent known average and therefore is most appropriate to use for target setting

# Tier 1 SAIDI threshold = 200

- 80% confidence interval for forward-projected SAIDI performance averages +/- 10.0 minutes, based on standard deviation for 2018-2022 SAIDI performance
- Threshold adjusted for impact of elevated improvement work volume during the MYRP, which is expected to raise SAIDI by ~10 minutes (driven by increased Hot Line Tag and Planned Outages)

# Tier 2 SAIDI threshold = 220

• Based on increase of 20 minutes above Tier 1 threshold

# Tier 3 SAIDI threshold = 240

• Based on increase of 20 minutes above Tier 2 threshold

# Projection of costs to be incurred and proposed resources (labor, contractors, materials, etc.) per Commission Rule R1-17B(d)(3)d.

Costs associated with the reliability PIM are expected to be minimal, as existing systems for tracking and reporting of SAIDI (excluding MEDs) to the Commission will be cross utilized for PIM reporting. This efficiency is enabled because the proposed metric mirrors existing reporting.

# Approach for evaluation, measurement, and verification

Current systems for tracking and calculation of SAIDI performance are to be used for PIM reporting, and the Company will use these existing resources to evaluate, measure, and verify compliance with or achievement of this PIM's terms.

# **Renewables Integration and Encouragement PIM**

This PIM is "upside-only" to the Company and has three subpart components to incent and reward the Company for (A) integrating additional distributed energy resources ("DER") that are located on customer premises; (B) designing, obtaining regulatory approval for, and offering new renewables programs subscribed to by commercial and industrial ("C&I") customers; and (C) designing, obtaining regulatory approval for, and offering new shared solar programs subscribed to by residential customers.

# Renewables Integration and Encouragement PIM - Metric A

# **Metric A: DER Integration**

The first proposed metric for the Renewables Integration and Encouragement PIM is the <u>total</u> number of Net Energy Metering ("NEM") projects connected by DEC during each Rate Year. Results will be reported annually after the end of each Rate Year, for performance during the Rate Year. Projects for all classes of DEC customers will be included in the performance assessment.

# **Metric A: PIM description**

In each year during the MYRP, the Company can earn a reward for exceeding performance thresholds for the proposed metric. Potential rewards are tiered to increase for cases where performance exceeds higher thresholds. Any earned reward would be recovered through the PIM rider established by the Commission upon authorization of the MYRP.

### **Metric A: Performance Thresholds**

There are two relevant matters pending before the Commission whose regulatory outcomes could have an impact upon the potential number of new NEM projects connected (the Joint Petition for Approval of Revised Net Energy Metering Tariffs and the Application for Approval of Smart \$aver Solar Energy Efficiency Program). While the structure of this PIM currently makes no assumption on the outcome of these proceedings, as these matters are resolved, we would look to adjust the targeted performance thresholds.

Table 1

	Performance threshold
Tier 1 performance threshold	3,856*
Financial <u>reward</u> if connections exceed value	\$1.5M
Tier 2 performance threshold	4,223*
Financial <u>reward</u> if connections exceed value	\$3M
Tier 3 performance threshold	4,590*
Financial <u>reward</u> if connections exceed value	\$6M

<u>Note:</u> \* Performance Thresholds are based on expected 3-year average annual connections for 2020-22 using currently available data. All Performance Thresholds are to be recalculated in early 2023 for complete historical connection data, using the methodology described in this exhibit.

Performance thresholds are calculated on the following basis:

Tier 1 performance threshold (3,856\*) represents <u>5% increase</u> from 3-year historic average (2020-22) annual connections estimated to be 3,672

Tier 2 performance threshold (4,223\*) represents <u>15% increase</u> from 3-year historic average (2020-22) annual connections

Tier 3 performance threshold (4,590\*) represents <u>25% increase</u> from 3-year historic average (2020-22) annual connections

Fixed performance thresholds will be used for all Rate Years.

# Metric A: Projection of costs to be incurred and proposed resources (labor, contractors, materials, etc.) per Commission Rule R1-17B(d)(3)d.

Costs associated with this metric are expected to be limited to administrative costs required for initial implementation of tracking systems and for annual support to reconcile data. These costs are estimated to be approximately \$5,000.

# Metric A: Approach for evaluation, measurement, and verification

The Company will solely use internal labor to collect, analyze, and report data for this metric. Expected costs associated with this work are included in the cost estimate above.

# Renewables Integration and Encouragement PIM - Metric B

# Metric B: Large Customer Renewable Program Encouragement

The second proposed metric for the Renewables Integration and Encouragement PIM is the <u>cumulative share of C&I customer renewables program capacity subscribed by eligible customers</u>. Results will be reported annually after the end of each Rate Year, for calculated performance as of the last day of the Rate Year.

Program subscription by eligible DEC customers as a share of installed and in-queue capacity (i.e., all capacity available for subscription) for DEC customers through eligible programs will be considered for performance assessment.

Specific formula for calculation of proposed metric:

Program subscription share (%) = 
$$\frac{cumulative\ customer\ subscription\ (MW)}{(\ cumulative\ installed\ capacity\ (MW))} + cumulative\ in\ queue\ capacity\ (MW))$$

# **Definitions:**

Cumulative customer subscription = MW of eligible program capacity that all DEC C&I customers have subscribed to (total for all eligible programs)

Cumulative installed capacity = MW of eligible program capacity that is installed and available for DEC C&I customer subscription (total for all eligible programs)

Cumulative in queue capacity = MW of eligible program capacity that is not yet in service, but is planned and available for DEC C&I customer subscription (total for all eligible programs)

# **Metric B: Eligible programs**

The PIM would consider new C&I customer renewables programs that financially and/or environmentally link off-site renewable facilities (not directly connected to a customer premises) to a C&I customer's account(s). For purposes of this PBR Application, eligible programs do not include any REC-only programs that have no term commitment.

The PIM would account for customer subscription as a share of total available capacity (including both installed and in-queue capacity) for eligible programs that are approved by the Commission subsequent to the filing of this PBR Application.

# **Metric B: PIM description**

In each year during the MYRP, the Company can earn a reward for meeting or exceeding performance thresholds for the proposed metric. Potential rewards are tiered to increase for cases where performance meets or exceeds higher thresholds. Any earned reward would be recovered through the PIM rider established by the Commission upon authorization of the MYRP.

**Metric B: Performance Thresholds** 

Table 2	Performance threshold
<b>Tier 1 performance threshold</b> Financial <u>reward</u> if performance meets or exceeds threshold	≥ 30% subscribed \$1,000,000
<b>Tier 2 performance threshold</b> Financial <u>reward</u> if performance meets or exceeds threshold	≥ <b>50% subscribed</b> \$2,000,000
Tier 3 performance threshold Financial <u>reward</u> if performance meets or exceeds threshold	≥ <b>70% subscribed</b> \$3,000,000

Tier 1 performance threshold (30%) is based on an optimistic forecast of program subscription during the initial years following approval of eligible programs. Tier 2 and 3 performance thresholds are based on an increase of 20% and 40%, respectively, over the Tier 1 threshold.

Proposed performance thresholds are applicable for all Rate Years, with performance assessed independently during each Rate Year (i.e., Tier 1 financial reward could be earned in consecutive years, if subscription rate falls between 30% and 50% in both Rate Years).

# **Example calculations:**

- a) Rate Year 1 ends with total available (installed + in-queue) capacity of 100 MW for DEC C&I customers across all eligible programs; DEC C&I customers have subscribed to 25 MW of available capacity:
  - $\circ$  Program subscription share = 25 / 100 = 25%
  - o Performance < Tier 1 threshold; no reward earned
- b) Rate Year 2 ends with total available (installed + in-queue) capacity of 250 MW (100 MW carried forward from Rate Year 1, with 150 MW added during Rate Year 2) for DEC C&I customers across all eligible programs; DEC C&I customers have subscribed to 100 MW (25 MW carried forward from Rate Year 1, with 75 MW new subscription during Rate Year 2) of available capacity:
  - $\circ$  Program subscription share = 100 / 250 = 40%
  - Performance > Tier 1 threshold and < Tier 2 threshold; reward of \$1,000,000 earned</li>

Metric B: Projection of costs to be incurred and proposed resources (labor, contractors, materials, etc.) per Commission Rule R1-17B(d)(3)d.

Internal program management resources, systems, and marketing efforts for applicable new large customer renewable programs will be in place to support new programs, including tracking. Therefore, incremental PIM-associated costs are expected to be minimal.

# Metric B: Approach for evaluation, measurement, and verification

Internal program management resources, systems, and marketing efforts for applicable new large customer renewable programs will be in place to support new programs, including tracking. Company will use these existing resources to evaluate, measure, and verify compliance with or achievement of this PIM's terms.

# Renewables Integration and Encouragement PIM – Metric C

# Metric C: Residential Customer Shared Solar Program Encouragement

The third proposed metric for the Renewables Integration and Encouragement PIM is the <u>cumulative share of residential customer shared solar program capacity subscribed by eligible customers</u>. Results will be reported annually after the end of each Rate Year, for calculated performance as of the last day of the Rate Year.

Program subscription by eligible DEC customers as a share of installed capacity available for subscription by DEC customers through eligible programs will be considered for performance assessment.

Specific formula for calculation of proposed metric:

 $Program \ subscription \ share \ (\%) = \frac{cumulative \ customer \ subscription \ (MW)}{cumulative \ installed \ capacity \ (MW)}$ 

# Definitions:

Cumulative customer subscription = MW of eligible shared solar program capacity that all DEC residential customers have subscribed to (total for all eligible programs)

Cumulative installed capacity = MW of eligible shared solar program capacity that is installed and available for DEC residential customer subscription (total for all eligible programs)

# **Metric C: Eligible programs**

The PIM would consider new shared solar customer renewables programs for residential customers that financially and/or environmentally link off-site renewable facilities (not directly connected to a customer premises) to a customer's account(s). For purposes of this PBR Application, eligible programs do not include any REC-only programs that have no term commitment.

The PIM would account for total cumulative residential customer subscription as a share of total cumulative installed capacity for eligible shared solar programs that are approved by the Commission subsequent to the filing of this PBR Application.

# **Metric C: PIM description**

In each year during the MYRP, the Company can earn a reward for meeting or exceeding performance thresholds for the proposed metric. Potential rewards are tiered to increase for cases where performance meets or exceeds higher thresholds. Any earned reward would be recovered through the PIM rider established by the Commission upon authorization of the MYRP.

**Metric C: Performance Thresholds** 

Table 3	Performance threshold
<b>Tier 1 performance threshold</b> Financial <u>reward</u> if performance meets or exceeds threshold	≥ <b>30% subscribed</b> \$500,000
<b>Tier 2 performance threshold</b> Financial <u>reward</u> if performance meets or exceeds threshold	≥ <b>50% subscribed</b> \$1,000,000
<b>Tier 3 performance threshold</b> Financial <u>reward</u> if performance meets or exceeds threshold	≥ <b>70% subscribed</b> \$1,500,000

Tier 1 performance threshold (30%) is based on an optimistic forecast of program subscription during the initial years following approval of eligible programs. Tier 2 and 3 performance thresholds are based on an increase of 20% and 40%, respectively, over the Tier 1 threshold.

Proposed performance thresholds are applicable for all Rate Years, with performance assessed independently during each Rate Year (i.e., Tier 1 financial reward could be earned in consecutive years, if subscription rate falls between 30% and 50% in both Rate Years).

# **Example calculations:**

- a) Rate Year 1 ends with total cumulative installed shared solar capacity of 30 MW for DEC residential customers across all eligible programs; DEC residential customers have subscribed to 8 MW of available capacity:
  - o Program subscription share =  $8 / 30 = \sim 27\%$
  - o Performance < Tier 1 threshold; no reward earned
- b) Rate Year 2 ends with total cumulative installed shared solar capacity of 70 MW (30 MW carried forward from Rate Year 1, with 40 MW added during Rate Year 2) for DEC residential customers across all eligible programs; DEC residential customers have subscribed to 30MW (8 MW carried forward from Rate Year 1, with 22 MW new subscription during Rate Year 2) of available capacity:
  - o Program subscription share =  $30 / 70 = \sim 43\%$
  - o Performance > Tier 1 threshold and < Tier 2 threshold; reward of \$500,000 earned

Metric C: Projection of costs to be incurred and proposed resources (labor, contractors, materials, etc.) per Commission Rule R1-17B(d)(3)d.

Internal program management resources, systems, and marketing efforts for applicable new residential customer shared solar programs will be in place to support new programs, including tracking. Therefore, incremental PIM-associated costs are expected to be minimal.

# Metric C: Approach for evaluation, measurement, and verification

Internal program management resources, systems, and marketing efforts for applicable new residential customer shared solar programs will be in place to support new programs, including tracking. The Company will use these existing resources to evaluate, measure, and verify compliance with or achievement of this PIM's terms.