STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY

:

Petition for Establishment of Performance : Docket No. 22-0067

Metrics Under Section 16-108.18(e) of the : On Rehearing

Public Utilities Act.

Direct Testimony on Rehearing of

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Commonwealth Edison Company

TABLE OF CONTENTS

I.	INTI	INTRODUCTION		
	A.	Witness Identification	1	
	B.	Purpose and Conclusions of Direct Testimony on Rehearing	1	
	C.	•		
II.	DISCUSSION			
	A.	Background	3	
	В.	The Incentive Targets That Should Be Adopted on Rehearing		

1 I. INTRODUCTION

- 2 A. Witness Identification
- **Q.** What is your name and business address?
- 4 A. My name is Brian Kirchman. My business address is 2 Lincoln Centre, Oakbrook Terrace,
- 5 Illinois 60181.
- 6 Q. Are you the same Brian Kirchman that submitted Rebuttal (ComEd Exhibit ["Ex."]
- 7 6.0), Supplemental Rebuttal (ComEd Exs. 13.0, 13.01), and Surrebuttal Testimony
- 8 (ComEd Exs. 20.0, 20.01, and 20.02), plus a Declaration (ComEd Ex. 28.0), in this
- 9 proceeding on behalf of Commonwealth Edison Company ("ComEd")?
- 10 A. Yes.

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- B. Purpose and Conclusions of Direct Testimony on Rehearing
- 12 Q. What is the purpose of your Direct Testimony on Rehearing?
- 13 A. The purpose of my Direct Testimony on Rehearing is to provide the Illinois Commerce
- 14 Commission (the "Commission" or "ICC") with additional information on the subject of
- the incentive targets of the Peak Load Reduction ("PLR") performance metric ("PM") that
- was established by the Commission in this docket on pages 133-134 and 144 of its final
- Order, dated September 27, 2022 ("final Order"). This subject is withing the scope of the
- rehearing ordered on the subject of the PLR PM by the Commission in its Notice of
- 19 Commission Action, dated November 14, 2022, which was defined by the Commission as:
- "Specifying peak load reduction incentive targets in Metric 4".

21 Q. What are the conclusions of your Direct Testimony on Rehearing?

Α.

In brief, the conclusions of my Direct Testimony on Rehearing are as follows: The Commission, on rehearing, should revise the Peak Load Reduction performance metric incentive targets in accordance with the compromise proposed by Staff in the original proceedings in this docket ("Staff's proposal"). Staff's proposal involves annual incentive targets that increase by 60 megawatts ("MW") per year, not by the 150 MW annual increase level established by the final Order.

Staff's proposal is supported by the evidentiary record in the original proceedings; my Direct Testimony on Rehearing; Staff's November 29, 2022, Response to ComEd Data Request ComEd-Staff 7.01 (a copy of which is attached hereto as ComEd Ex. 37.01); and data for the existing programs in the PLR PM's program portfolio or "stack" (attached hereto as ComEd Ex. 37.02). The PLR PM incentive targets proposed by Staff and supported by Staff and ComEd (meaning incentive targets that increase by 60 MW per year) are practical and achievable by the utility, encourage cost-effective and equitable achievement of customer benefits (reduced capacity costs and other possible benefits), and are designed to achieve appropriate levels of incremental increases year over year.

In contrast, Staff and ComEd agree that the 150 MW annual increase level set by the final Order is likely unrealistic and unachievable.

- Q. Are you addressing the subject of the six basis points that was assigned to penalties and incentives for the PLR PM by the final Order?
- A. No. My understanding, as a non-lawyer, is that the Commission's Notice of Commission

 Action does not include that subject within the scope of this rehearing.

43 C. Attachments to Direct Testimony on Rehearing

- 44 Q. Are there any attachments to your Direct Testimony on Rehearing?
- 45 A. Yes. As I noted above, a copy of Staff's November 29, 2022, Response to ComEd Data
 46 Request ComEd-Staff 7.01 is attached hereto as ComEd Ex. 37.01.

In addition, I have included ComEd Ex. 37.02, which provides a summary of applicable data for the existing programs in the PLR PM's program "stack". This data illustrates the trends over time in ComEd's ability to increase participation in the existing stack programs. It also demonstrates that the ComEd-Staff proposed target of 60 MW of annual incremental increase to the program portfolio is realistic, while the final Order's target of 150 MW likely is not.

53 II. DISCUSSION

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- A. Background
- Q. In the original proceedings in this Docket, what was Staff's compromise proposal for the incentive targets for the Peak Load Reduction performance metric?
- A. Staff's compromise proposal for the incentive targets for the Peak Load Reduction performance metric was set forth in Staff's Reply Brief on Exceptions ("RBOE") filed in this docket on September 7, 2022. Staff's RBOE stated in part:

Staff disagrees with some of the content of ComEd's Brief on Exceptions related to Peak Load Reductions. The ALJPO correctly assigns an annual penalty/reward structure. The Commission should not be persuaded by ComEd's arguments against that structure. However, in explaining the penalty/reward structure, ComEd makes arguments that are worthy of consideration, that achieving 150 MWs annually as Staff recommends in its BOE is unrealistic and likely unachievable. (ComEd BOE, 32.) Accordingly, Staff modifies its recommendation. Staff believes the penalty/reward structure presented by Staff is appropriate, but the Commission should consider a lower performance metric target and fewer basis points. Staff recommends an annual goal of 60 MWs and 2 basis

points. This will make the metric meaningful and achievable while minimizing the risk to both the Company and to ratepayers.

Staff RBOE at pp. 16-17 (emphasis added to original).

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In addition, page 18 of Staff's RBOE stated in part: "Given the magnitude of the reduction requirements as articulated in ComEd's BOE, Staff no longer believes it is feasible to achieve 150 MWs annually. ****"

Finally, page 19 of Staff's RBOE stated in part:

As an alternative, Staff recommends the Commission lower both the target and the basis points associated with this metric so that the goal is more likely to be attainable for the Company and beneficial to ratepayers. ComEd witness Brian Kirchman proposed about 60 MWs and 2 basis points in his surrebuttal testimony, so this calculation is supported by the record. Staff recommends that the Commission use these values along with Staff's penalty reward structure provided below.

[TABLE 1]¹

Year	-2 to 0 bps	0 bps	0 to +2 bps
2024	B_{23} to $B_{23} + 10$ MW	$B_{23} + 10 \text{ MW to } B_{23} + 50$	$B_{23} + 50 \text{ MW to } B_{23} + 60$
		MW	MW
2025	B_{24} to $B_{24} + 10$ MW	$B_{24} + 10 \text{ MW to } B_{24} + 50$	$B_{24} + 50 \text{ MW to } B_{24} + 60$
		MW	MW
2026	B_{25} to $B_{25} + 10$ MW	$B_{25} + 10 \text{ MW to } B_{23} + 50$	$B_{25} + 50 \text{ MW to } B_{26} + 60$
		MW	MW
2027	B_{26} to $B_{26} + 10$ MW	$B_{26} + 10 \text{ MW to } B_{26} + 50$	$B_{26} + 50 \text{ MW to } B_{26} + 60$
		MW	MW

 $[*]B_{23}$ = baseline from 2023 reductions.

^{*} B_{24} = minimum (2024 achieved reduction, B_{23} + 60 MW)

 $[*]B_{25}$ = minimum (2025 achieved reduction, B_{24} + 60 MW)

 $[*]B_{26}$ = minimum (2026 achieved reduction, B_{25} + 60 MW)

¹ Note that I have added the heading "[Table 1]", which did not appear in Staff's RBOE, for ease of reference going forward.

Q. In the original proceedings in this Docket, at the Reply Brief on Exceptions stage,
 what was ComEd's position regarding the incentive targets of the PLR PM?

A. ComEd's primary position was supportive of Staff's RBOE proposal. More specifically, ComEd then stated it "does not oppose" Staff's proposal, and ComEd also then stated, among other things, that: "ComEd believes that Staff's compromise proposal will yield a PLR performance metric that is practicable and achievable and that it is one of the possible outcomes for this metric that is supported by the evidence in the record." Please see pages 33-34 and 35-36 of ComEd's RBOE filed in this docket on September 7, 2022.

ComEd, in the alternative, recommended its final revised position as it had been presented and supported in its Brief on Exceptions ("BOE") dated August 31, 2022, which involves a fairly similar incentives structure with a targeted annual increase of 58 MW and a maximum of 2 basis points. *See* ComEd's RBOE, pp. 34-35; ComEd's BOE, pp. 32-44. On rehearing, absent adoption of Staff's proposal, I believe that ComEd's final revised position at the BOE stage should be adopted for the reasons stated by ComEd in the original proceedings and the further reasons reflected in my Direct Testimony on Rehearing.

- Q. In the original proceedings in this docket, what incentive target structure did the final Order adopt?
- A. Instead of 60 MW (or 58 MW) annual incentive target increases with a 2 basis point maximum, as proposed by Staff and ComEd, the final Order adopted a structure that provided for 150 MW annual incentive target increases with a 6 basis point maximum. *See* the final Order, pp. 133-134, 144.

The final Order did not present a table, but ComEd's understanding is that the rulings lead to the following Table 3, reprinted from page 9 of ComEd's compliance Multi--Year Performance and Tracking Metrics Plan ("Plan"), filed in this docket on November 22, 2022.

116 **TABLE 2**

Year	-6 to 0 bps	0 bps	0 to +6 bps
2024	B_{23} to $B_{23} + 50 MW$	$B_{23} + 50.1 \text{ MW to } B_{23} +$	$B_{23} + 100 \text{ MW to } B_{23} +$
		99.9 MW	150 MW
2025	B_{24} to $B_{24} + 50 MW$	$B_{24} + 50.1 \text{ MW to } B_{24} +$	$B_{24} + 100 \text{ MW to } B_{24} +$
		99.9 MW	150 MW
2026	B_{25} to $B_{25} + 50$ MW	$B_{25} + 50.1$ MW to $B_{23} +$	$B_{25} + 100 \text{ MW to } B_{26} +$
		99.9 MW	150 MW
2027	B_{26} to $B_{26} + 50$ MW	$B_{26} + 50.1 \text{ MW to } B_{26} +$	$B_{26} + 100 \text{ MW to } B_{26} +$
		99.9 MW	150 MW

 $[*]B_{23}$ = baseline from ComEd applicable 2023 reductions.

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B. The Incentive Targets That Should Be Adopted on Rehearing

- Q. Do you understand Staff's position on rehearing to remain supportive of its proposal that has incentive targets that increase by 60 MW per year?
- 125 A. Yes. Staff has articulated in its November 29, 2022, Data Request Response (attached as
 126 ComEd Ex. 37.01) that it remains supportive of its RBOE proposal of 60 MW annual
 127 incentive target increases.
 - Q. You have stated earlier in this testimony that, on rehearing, Staff's proposal with incentive targets that increase by 60 MW per year, is practical and achievable by the utility, encourages cost-effective and equitable achievement of customer benefits (reduced capacity costs and other possible benefits), and is designed to achieve

^{*} B_{24} = minimum (2024 achieved reduction, B_{23} + 150 MW)

 $[*]B_{25}$ = minimum (2025 achieved reduction, $B_{24} + 150$ MW)

^{*} B_{26} = minimum (2026 achieved reduction, B_{25} + 150 MW)

appropriate levels of incremental increases year over year. On what information do you base your statements?

A.

- My statements are based on data, and related forecasts, for those existing ComEd load reduction programs comprising the PLR PM program stack, specifically ComEd's existing demand response program portfolio with its Central AC Cycling Direct Load Control ("AC Cycling DLC"), Peak Time Savings ("PTS"), and Dynamic Pricing ("Rider RRTP" or "Hourly Pricing") programs. All performance metrics should be grounded in existing data, which is used to establish the baseline. The data should then be used to forecast growth over the metric period (in this case 2024-2027) to establish the goals and the annual targets. The use of existing data in this manner ensures that the final performance metrics design is realistic and achievable by the utility.
- Q. What do the data and related forecasts show with regards to the ability of the existing programs in the stack to add incremental MW load reduction in 2024 through 2027?

 The proposals by Staff and ComEd of 60 MW (and 58 MW) incremental targets are supported by forecasts of how much the existing program stacks can be expected to grow in 2024-2027. The majority of load reduction in the program stack is expected to come from ComEd's established PTS program. Over the last 8 years², ComEd has provided every residential customer with an Advanced Metering Infrastructure ("AMI") meter as of December 1, 2022, 99.88% of ComEd's residential customers with information about the PTS program and invited the customers to enroll in the PTS program. ComEd also has

² ComEd has been marketing the Peak Time Savings program for 8 years, but the analysis for the 2022 season is not yet complete for any of the programs in the stack, and so much of this discussion will focus only on the 2015-2021 season data.

contacted customers multiple times from a marketing perspective about the PTS program through various channels, like targeted direct mail. As shown in ComEd Ex. 37.02, when these PTS program marketing campaigns were occurring (between the 2015 and 2018 season), the PTS program increased in size by 31.2 MW over 3 years. Based on final available MW data, the highest year-over-year increase for these programs is 61.2 MW, realized in 2018. More recently, the portfolio has been losing customers and MW (an average of 8.7 MW of incremental loss between 2019 and 2021) for various reasons. Thus, based on historic data, the 60 (or 58) MW annual increase is a challenging, but achievable, target for the PLR metric. That annual increase target likely represents sustainable growth if ComEd were to expand our portfolio to reflect the full potential of the approved stack.

- Q. What do the data and related forecasts show with regards to the ability of the existing programs in the stack to achieve the incentive targets of 150 MW annual increases set by the final Order in 2024 through 2027?
- A. Simply put, the data shows that the 150 MW incentive target annual increase is likely unrealistic and unachievable, for several reasons.

First, as I just explained, based on historic customer information and enrollment campaigns for the PTS program (the stack's overwhelming largest existing program), achieving a PLR PM incentive target of 150 MW in annual increases over four years (2024-2027) will be extraordinarily difficult, even with significant investment in marketing and other mechanisms for enrollment. To reach the Order's 150 MW target, ComEd would have to grow its existing program stack programs almost 600% in four years. To reach the 100 MW target (which is the minimum needed to start earning incentives),

ComEd would have to increase its existing program stack programs almost 400% in four years. What is far more likely is that ComEd will earn a penalty for this metric. As shown in Table 1, under Staff's RBOE proposal, to avoid penalties, ComEd would need to achieve 50 MW incremental each year, which as I have explained with historical data, will itself be challenging. So, as set out in the final Order, the PLR PM opens ComEd to the real possibility of financial penalties while not offering up any real potential for achieving incentives.

Second, the programs comprising ComEd's existing program stack are already close to saturation levels in terms of interested customers. For example, the third-party evaluator for Peak Time Savings recently noted in the Commonwealth Edison Company Peak Time Savings Program Report (filed as a compliance filing in ICC Docket Nos. 19-0858 and 12-0484 on August 29, 2022), at p. 61, that:

Currently, nearly 10% of ComEd residential customers are enrolled in PTS, which is among the highest opt-in residential peak time rebate program penetration in the country, and the program could conceivably be nearing maximum penetration.

Additional marketing and customer enrollment efforts in these programs will encounter diminishing returns. Therefore, significant increases in participation in existing stack programs will be difficult (and likely costly) to achieve.

Third, while ComEd will be able to create and add new load reduction programs to the stack for purposes of this PM (see the final Order at pp. 133-134), the design and creation of new programs that can provide substantial load reduction contributions will be difficult. The type of programs that ComEd can add is constrained (*e.g.*, ComEd may only add "future EE programs developed for this metric that are not incentivized through the

plans adopted and compensated under Section 8-103B" (final Order at p. 133)) and will require future Commission approvals. Additionally, ComEd already offers a residential demand response portfolio that includes most opportunities for load reduction recognized and used by other utilities.

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Fourth, even if ComEd is able to create and add new load reduction programs to the stack for purposes of this metric, they will likely not contribute substantive load reduction MW right away. Demand response programs that rely on customer enrollment and participation generally require long ramp-up times. For example, the Peak Time Savings program did not achieve its current level of enrollment for seven years, and it had only achieved 38.9 MW cumulative from the start of the program (in 2014) through the 2018 season.

- The final Order (on p. 134) states in part that: "The Commission further agrees with the Solar Intervenors that other DERs, such as battery energy storage, and solar plus storage, shall be included in this metric. As noted by CUB/EDF, this is consistent with the goals and policies of the P.A. 102-0062 that encourage energy storage systems integration as the means to reduce peak load, for example in 220 ILCS 5/16-135(a)(1)(B)." Does including these resources change what future level of load reduction is reasonably achievable by ComEd for the PLR metric?
- No. Batteries and solar plus storage cannot be relied upon to make the 90 MW annual incremental load reduction delta between Staff's proposal (60 MW) and the final Order's ruling (150 MW). While I understand the final Order to require ("shall") battery and solar plus battery storage to be included in the PLR program stack and ComEd intends to

investigate using batteries and solar plus battery storage in efforts to increase peak load reduction – that inclusion does not assuage my concerns about the 150 MW incentive target annual increases not being reasonable, realistic, and achievable. The same general concerns I articulated above about new programs being able to substantively contribute to the program stack are particularly apt for battery and/or solar plus battery storage. To count the load reduction for any battery or solar plus battery storage project towards the achievement of this metric, the project would presumably have to be driven by ComEd efforts. See pages 133-134 of the final Order. Battery and solar plus storage projects installed in ComEd's service territory in a cost-effective manner will not occur overnight. It is unlikely that significant battery resources will be available to help meet the first few years' PLR PM targets. Additionally, it is not clear how much load reduction will be attributable to ComEd's efforts for these projects. Installed battery nameplate capacity does not equate to peak load reduction potential. In fact, peak load reduction potential is always less than the installed battery nameplate capacity. In other words, while ComEd intends to include batteries and solar plus battery storage in its future efforts around this PM, it is unclear by when and how much those projects will contribute to the achievement of this metric.

Q. Does this complete your Direct Testimony on Rehearing?

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