Date Filed: September 15, 2026

Witness: Julia Frayer
Request from: Office of Consumer Counsel

Question:

Performance Based Ratemaking Panel Exhibit CLP-PBR-1
Please state whether excluding utilities operating under PBR, or alternatively calculating OM&A PFP separately for PBR and non-PBR utilities, would change the -0.3% OM&A PFP estimated used for supporting the proposed X factor.

Response:

For clarification, the Industry TFP Study's estimated average annual OM&A PFP growth rate is negative 0.03% (-0.03%), not negative 0.3% (−0.3%) as suggested in the text of the question.

LEI did not perform the alternative calculations described in this question and therefore has not determined whether, or to what extent, they would change that estimate. Please also refer to OCC-540[i] and OCC-541[ii].

As explained in Exhibit CLP-PBR-2, Sections 1.4 and 2, the Industry TFP Study's purpose is to estimate productivity trends for the industry as a whole using a broad, representative sample.
A different result for a restricted sample would not, by itself, establish that the restricted sample provides a more appropriate benchmark for the proposed X Factor for the Company.

Prior Referenced Responses:

[i] OCC-540 Question:

Performance Based Ratemaking Panel Exhibit CLP-PBR-1
Please identify which of the 88 EDCs included in LEI's Industry TFP and PFP Study operated under a performance-based regulation (PBR) framework, as opposed to traditional cost-of-service regulation, during the 2005–2024 study period, including the applicable years for each regulatory framework.

OCC-540 Response:

As explained in Exhibit CLP-PBR-1, pages 11–12, and Figure 1, specifically, PBR is best understood as a continuum rather than a single, uniform regulatory regime. PBR mechanisms can range from performance targets and earnings-sharing mechanisms to more comprehensive multi-year price or revenue cap frameworks. Accordingly, PBR and

traditional cost-of-service ("COS") regulation are not mutually exclusive, because PBR mechanisms may be incorporated within an otherwise traditional rate-proceeding framework.

Only a few jurisdictions in the U.S. have had a formal PBR framework from 2005-2024. For example, Hawaiian Electric Companies (not included in LEI's Industry TFP Study), NSTAR Electric Company, and Massachusetts Electric Company, have been under a comprehensive index-based price or revenue cap framework in recent years.

Jurisdiction	EDC	Applicable PBR period
Massachusetts	NSTAR Electric Company	2006–2012; 2018–2022; 2023–2024
Massachusetts	Massachusetts Electric Company	Oct. 1, 2019–Dec. 31, 2024 (successive plans)

In addition, LEI identified the following utilities included in the Industry TFP Study as having operated under multi-year regulatory arrangements incorporating PBR components during at least part of the 2005–2024 study period:

Jurisdiction	EDC	Applicable PBR period
New York	Central Hudson Gas & Electric Corporation	July 1, 2021–June 30, 2024
New York	Consolidated Edison Company of New York, Inc.	2017–2019; 2020–2022
New York	New York State Electric & Gas Corporation	Aug. 26, 2010–Dec. 31, 2013; May 1, 2016–Apr. 30, 2019
New York	Rochester Gas and Electric Corporation	Aug. 26, 2010–Dec. 31, 2013; May 1, 2016–Apr. 30, 2019
New York	Orange and Rockland Utilities, Inc.	July 2012–June 2015; 2019–2021
Vermont	Green Mountain Power Corporation	FY2020–FY2022; Oct. 1, 2022–Dec. 31, 2024
Rhode Island	The Narragansett Electric Company	Sept. 1, 2018–Aug. 31, 2021
Connecticut	The United Illuminating Company	2017–2019
North Carolina	Duke Energy Carolinas, LLC (North Carolina operations)	2024 (plan continues through 2026)
North Carolina	Duke Energy Progress, LLC (North Carolina operations)	Oct. 1, 2023–Dec. 31, 2024
Illinois	Ameren Illinois Company	2024 (plan continues through 2027)
Illinois	Commonwealth Edison Company	2024 (plan continues through 2027)
Washington	Avista Corporation (Washington operations)	Dec. 21, 2022–Dec. 20, 2024
Washington	Puget Sound Energy, Inc. (Washington operations)	2013–2016 plan/stay-out; 2023–2024

The regulatory framework applicable to an individual EDC was not an input to, or criterion for, inclusion in LEI's Industry TFP Study. As explained in Exhibit CLP-PBR-2, Section 1.4, the Industry TFP Study, uses a broad sample of 88 EDCs representing approximately 90% of customers served by U.S. investor-owned utilities to capture the diversity of the electric distribution industry and estimate industry-average productivity trends. Accordingly, differences in regulatory framework do not, by themselves, provide a basis for excluding an EDC from an Industry TFP Study.

[ii] OCC-541 Question:

Performance Based Ratemaking Panel Exhibit CLP-PBR-1
Please state whether LEI evaluated whether OM&A PFP trends differed between utilities operating under the PBR and utilities operating under traditional cost-of-service regulation, and whether utilities' OM&A PFP trends differed between periods before PBR application and under PBR application. If so, please provide the results of the analysis.

If not, please explain why such an analysis was not performed and provide, if available, the OM&A PFP growth rates separately for the two different groups.

OCC-541 Response:

This would be an interesting analysis, but there are several empirical challenges to conducting it reliably. First, incentives to pursue efficiency improvements can arise from a range of formal and informal features of a regulatory regime, including stay-out provisions, multi-year rate plans, voluntary rate freezes, and regulatory lag between rate cases. As noted in our response to OCC-540, a number of utilities have operated, or currently operate, under some form of PBR (formula based or MYRP), while others have experienced extended periods of rate freezes or regulatory lag, such as MidAmerican Energy in Iowa (who went for 10 years without a rate case). LEI has not undertaken an exhaustive review of the regulatory regimes applicable to every utility over the study period. The sub-sample of companies identified in that Response is unlikely to cover the entire industry, and an analysis limited to it would therefore not constitute an industry-wide study.

Second, and more fundamentally, the strength of the incentive to improve efficiency depends on multiple, interacting features of a regulatory regime rather than on any single characteristic. Distribution ratemaking in the U.S. is the domain of state regulators, so there are diverse regulatory mechanisms in place. For example, one utility may be subject to a formal stay out provision, others may be under voluntary rate freeze, while another may have an earnings sharing mechanism, or a forecast-based multi-year plan with advance ratemaking treatment for certain investments, variance accounts or other mechanisms. Cost and productivity outcomes may also be affected by factors unrelated to PBR, such as corporate restructuring or merger-related synergies. As a result, regulatory regimes that appear similar at a high level may create materially different efficiency incentives. Given the diversity of regulatory frameworks across U.S., a simple classification based on the presence (or lack thereof) of a specific regulatory feature may not provide a sufficiently robust basis for an industry-wide empirical comparison.

A further challenge is that adoption of PBR-like regulatory mechanisms may have occurred at different times and for different durations across utilities. The second part of the question contemplates a comparison of productivity before and after “PBR” adoption, but given there is no common implementation date for various PBR mechanisms, it would be difficult to get a cohesive industry-wide “before-and-after” comparison.

For the above reasons, LEI did not perform a PBR-versus-COS or pre-/post-PBR OM&A PFP analysis as part of this study. The purpose of LEI's TFP study was to estimate the long-term productivity trend for the industry, rather than at a firm-specific level. Economic theory then recommends using the industry productivity trends to establish the X Factor under an I-X framework.

The broader proposition that incentive regulation can strengthen incentives for cost efficiency relative to traditional cost-of-service regulation is supported by the regulatory economics literature and evaluations of incentive regulation. For example, Jamasb and Pollitt's study of British electricity distribution under incentive regulation found that the regime was associated with reductions in costs, prices, and energy losses while maintaining service quality. LEI's review of the UK experience similarly observed that the stronger incentives under PBR were associated with substantial productivity improvements and that utilities responded to tighter price controls by reducing operating costs, labor, and materials.

The Alberta Utilities Commission reached similar conclusions in its evaluation of Alberta’s PBR experience. The Commission found that PBR had incented utilities to find efficiencies and that utilities engaged in productivity improvements to reduce costs, concluding that “in this respect, PBR was successful.” The Commission also found that customers experienced lower rates under PBR than would have been expected under COS regulation.

These studies and regulatory findings provide evidence regarding the efficiency incentives associated with PBR, but they are not a substitute for the utility-by-utility empirical analysis described in this interrogatory.