Date Filed: October 15, 2026

Witness: Julia Frayer
Request from: CLF and Acadia Center

Question:

(Productivity Factor) Refer to Exhibit CLP-PBR-2, Section 2.2.

a) Confirm whether the Company's proposed productivity factor is derived using an indexing (historical peer performance) methodology rather than an efficiency frontier analysis.
b) Please identify every methodology considered in deriving the Company's proposed productivity factor and state the criteria used to select the indexing methodology over the alternatives.
c) If an indexing methodology was used as confirmed in (a) above, produce all workpapers, memoranda, and analyses used that compared the index method to efficiency frontier analysis for purposes of this proceeding, including any cost-benefit or sensitivity analysis of the two approaches.

Response:

a) Yes, the Company's proposed productivity factor is derived using an index-based methodology (see Section 2.2 on page 19-21 of Exhibit CLP-PBR-2).

b) LEI's Industry TFP Study described the index-based methodology, as well as data envelopment analysis, and Stochastic Frontier Analysis. The reasons for choosing the index-based numerical method are discussed in Section 2.2 on page 19-21 of Exhibit CLP-PBR-2.

c) There are no such materials that compared the results in Exhibit CLP-PBR-2 versus alternative methods. See refer to the Company's response to subpart (b) above.

Date Filed: October 15, 2026

Witness: Julia Frayer
Request from: CLF and Acadia Center

Question:

(Productivity Factor) Refer to the Company's and/or LEI's prior positions on productivity factor methodology in other jurisdictions.

a) Identify any prior PURA (or other state commission) docket in which the Company or LEI have advocated for or applied an efficiency frontier methodology, and explain any difference in position taken in this proceeding.
b) State whether the Company agrees that an efficiency frontier approach would better isolate achievable productivity gains by benchmarking against best-practice utilities rather than the Company's own historical peer group. If the Company disagrees, please explain why, with supporting data.
c) Quantify what the productivity factor would be under an efficiency frontier methodology using the same or comparable underlying data, or explain why such a calculation was not performed.

Response:

a) Based on LEI's review of its prior regulatory work and the Company's rate applications over the last 20 years, LEI has not identified a prior PURA or other U.S. state commission docket in which the Company or LEI advocated for or applied an efficiency frontier methodology to derive a productivity factor.

b) As explained in Section 2.2 of Exhibit CLP-PBR-2, "there are a number of methods that can be used to estimate a TFP trend for an industry," each of which has its own advantages and limitations. Sections 2.2 and 2.3, together with Figure 6 of Exhibit CLP-PBR-2, discuss these alternative approaches and LEI's rationale for selecting an index-based methodology. Specifically, LEI wrote: "Index methods are more transparent when dealing with outliers, unlike DEA [Data Envelopment Analysis] and SFA [Stochastic Frontier Analysis] methods, and require significantly fewer data points/observations to reach a robust conclusion. For these reasons, index methods are often used for informing regulators in ratemaking proceedings."

c) LEI did not undertake such an analysis, for the reasons laid out in response to CLF-AC-14 (b).

Date Filed: October 15, 2026

Witness: Julia Frayer
Request from: CLF and Acadia Center

Question:

(Productivity Factor) Refer to Exhibit CLP-PBR-2.

a) Identify all datasets used in LEI's productivity factor study (hereinafter the "Study"), and for each dataset state whether it is publicly available.
b) For each dataset that is not publicly available, please describe its source, how the Company compiled the dataset, and why a non-public dataset was used instead of a publicly available standardized dataset.
c) Please state whether LEI compared results derived from its proprietary/non-public dataset against results derived from publicly available data and, if so, produce all data, workpapers, and calculations showing how that comparison was performed.

Response:

a) As outlined in "Appendix F: List of Sources," LEI relied on publicly available sources for all datasets used in the productivity factor study.

Data Series	Source
Customers	Publicly available via EIA 861
Distribution Plant (Balance at Beginning of Year); Distribution Plant (Additions); Distribution Plant (Retirements); Distribution Plant (Balance at End of Year); Total Electric Plant (Balance at End of Year); Electric Operation and Maintenance Expenses (Total Distribution Expenses) Electric Operation and Maintenance Expenses (Total Customer Accounts Expenses) Electric Operation and Maintenance Expenses (Total Customer Service and Informational Expenses) Electric Operation and Maintenance Expenses (Total Sales Expenses)	Publicly available via FERC Form 1

Data Series	Source
Electric Operation and Maintenance Expense (Total Administrative and General Expenses) Distribution of Salaries and Wages (Distribution) Distribution of Salaries and Wages (Customer Accounts) Distribution of Salaries and Wages (Customer Service and Informational) Distribution of Salaries and Wages (Sales) Distribution of Salaries and Wages (Administrative and General)	
GDP Implicit Price Deflator for Final Sales to Domestic Purchasers	Publicly available via US Bureau of Economic Analysis
Normalized Producer Price Index by Commodity: Special Indexes: Construction Materials (WPUSI012011) Employment Cost Index: Total compensation, private industry workers, by occupation and industry group, not seasonally adjusted - Electric, gas, and sanitary services (ECU12542I) Employment Cost Index: Total compensation, private industry workers, by occupation and industry group, not seasonally adjusted, current dollar index - Utilities (CIU20144000000000I (B))	Publicly available via US Bureau of Labor Statistics
Moody's Seasoned AAA Corporate Bond Yield	Publicly available via Federal Reserve Economic Data
Market Yield on US Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis, Inflation-Indexed, Percent, Annual, Not Seasonally Adjusted	Publicly available via Federal Reserve Economic Data
Historical State Tax Rate Data	Publicly available via Institute on Taxation and Economic Policy
Daily Treasury Par Yield Curve Rates	Publicly available from the US Department of the Treasury

Data Series	Source
Depreciation Life for Tax Purposes	Publicly available from the Internal Revenue Service

b) As stated in subpart (a), above, LEI relied on publicly available sources for all datasets used in the productivity factor study.

c) As stated in subpart (a), above, LEI relied on publicly available sources for all datasets used in the productivity factor study.

Date Filed: October 15, 2026

Witness: Julia Frayer
Request from: CLF and Acadia Center

Question:

(Productivity Factor) Refer to the U.S. Bureau of Labor Statistics' (BLS) Total Factor Productivity ("TFP") data for the utilities industry (available at https://www.bls.gov/productivity/tables/, "Total factor productivity by major industries"), and Exhibit CLP-PBR-2, Section 2.5 (productivity factor formula).

a) Please explain why the Study did not rely on the BLS TFP data for utilities as its primary data source or as a verification or validation source for the Study's results.

b) Applying the Section 2.5 formula to the BLS TFP data for utilities, confirm or refute that average productivity growth over the 2005-2024 period is approximately 0.457%. If the Company's calculation differs, please demonstrate how the calculation was completed and explain the discrepancy.

c) Discuss every difference between the "output" metric selected for the TFP analysis used in Exhibit CLP-PBR-2, (e.g., "number of customers"), and the output metric used by BLS.

d) State whether the Company has a fully replicable model (data plus formulas) underlying the Study's recommended productivity factor, sufficient for intervenors' experts to independently verify and stress-test the result. If yes, please include a copy of said model as part of the Company's response to this question. If such a model will not be produced and shared for analysis by other stakeholders, please explain why not.

Response:

a) The Study did not rely on the BLS ("U.S. Bureau of Labor Statistics") total factor productivity ("TFP") series for Utilities as its primary data source because the scope of the BLS measure is materially broader than the electric distribution industry examined in LEI's Study. BLS identifies the Utilities industry in its major-industry TFP statistics as NAICS 22.[1]

The BLS definition of NAICS 22 includes establishments providing electric power, natural gas, steam supply, water supply, and sewage removal, and the electric-power component itself includes generation, transmission, and distribution.[2]

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1 BLS. *Total Factor Productivity for Major Industries Release Technical Notes*. 2026.

2 BLS. *Utilities: NAICS 22*. 2026.

By comparison, electric power distribution is a narrow activity separately classified as NAICS 221122, covering establishments primarily engaged in operating electric distribution systems or arranging the sale of electricity over distribution systems.[3] To LEI's knowledge, BLS does not publish an RFP series for NAICS 221122.

Accordingly, the BLS Utilities TFP measure reflects productivity changes across activities outside the scope of the Study, including electric generation and transmission, natural gas distribution, and water and sewage services, which may have materially different technologies, cost structures, and productivity drivers.

Although the BLS series and LEI's Industry TFP Study both apply the general TFP concept of comparing output growth with growth in combined inputs, the measures are not directly comparable. LEI's Industry TFP Study uses number of customers as its primary output measure and capital and OM&A as its inputs, whereas BLS measures Utilities output using real sectoral output derived from the inflation-adjusted value of industry sales ($) and other output rather than a single physical measure such as MWh sold, and combines inputs of capital, labor, energy, materials, and services.[4]

In summary, the difference in the coverage of utility businesses and these differences in the definitions of output and inputs limit the usefulness of the BLS series as a validation benchmark of the results of LEI's Industry TFP Study.

b) Applying the formula shown in Figure 8 of Section 2.5 of LEI's Industry TFP report to the BLS TFP data, results in 0.457% average growth rate. However, for reasons discussed in subpart (a) above, this is not a comparable statistic that can be used to validate the TFP trends for the electric distribution sector. The BLS TFP index is for all types of utilities in the U.S. and is not specific to the electric distribution sector.

c) LEI's Industry TFP Study uses customer numbers as its output measure, which is a physical measure of the number of customers served by electric distribution companies. Each customer is therefore treated as a unit of output, irrespective of electricity consumption, revenues, or customer type. By contrast, BLS uses real sectoral output, which measures the goods and services produced by an industry for delivery outside that industry; sectoral output is based on gross output (including sales, receipts and other operating income in dollars), less transactions within the same industry. [5]

BLS therefore measures changes in the quantity and mix of goods and services produced, rather than changes in the number of customers served. Where multiple outputs are combined, BLS

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3 United States Census Bureau. *NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM*. 2022. P. 117.
4 BLS. *Total Factor Productivity for Major Industries Release Technical Notes*. 2026.
5 BLS. *Total Factor Productivity for Major Industries Release Technical Notes*. 2026.

uses a chained Törnqvist index that weights the component outputs according to their economic value shares.[6] BLS also notes that physical-quantity output measures are used for some industries within the utilities sector.[7] Thus, customer growth and BLS real output can move differently, for example, output per customer or the mix of utility services can change even when customer numbers remain unchanged.

d) Yes. The recommended productivity factor in LEI's Industry TFP Study was developed using a fully functional model utilizing underlying data, formulas and calculations necessary to reproduce the reported result. LEI will produce the confidential and proprietary model to CLF, subject to the execution of an appropriate confidentiality agreement with commercial terms.

6 BLS. *Industry Productivity Measures: Estimation*. 2026.

7 BLS. *Office of Productivity and Technology: Calculation*. 2026.

Date Filed: October 16, 2026

Witness: Douglas P. Horton and Julia Frayer
Request from: CLF and Acadia Center

Question:

(Productivity Factor) Refer to the productivity factor(s) recommended in the Study, including any component factor for capital expense, and the Company's proposed revenue cap formula.

a) State whether the recommended productivity factor, or any factor, is negative for any year(s) in the Study period, and if so, identify each such year and the value.
b) Provide all analyses showing the revenue or rate base impact to ratepayers in each year of the study period that would result from applying a negative productivity factor, as compared to a factor floored at zero.

Response:

a) The table below is Figure 2 of CLP-PBR-2, which provides years with negative OM&A PFP growth rate. There are nine (9) annual periods where the PFP trend was negative.

Year	OM&A PFP
2006-2007	-5.79%
2008-2009	-1.52%
2009-2010	-0.54%
2010-2011	-1.72%
2015-2016	-0.79%
2016-2017	-0.17%
2018-2019	-0.49%
2019-2020	-12.72%
2021-2022	-4.83%

Below is a table listing the years with a negative TFP growth rate. This table is from Figure 2 of CLP-PBR-2. There are 15 annual periods where the TFP trend was negative.

Year	TFP
2006-2007	-3.62%
2007-2008	-0.21%
2008-2009	-2.15%
2009-2010	-0.96%
2010-2011	-1.92%
2011-2012	-0.93%
2013-2014	-1.43%
2015-2016	-2.09%
2016-2017	-1.82%
2017-2018	-0.53%
2018-2019	-2.12%
2019-2020	-8.14%
2021-2022	-3.09%
2022-2023	-1.39%
2023-2024	-0.67%

b) LEI's Industry TFP Study estimated a TFP for 20 years as well. The value is -1.41% (see Figure 22 of CLP-PBR-2). If using an economy wide inflation index (such as GDP-Implied Price Deflator for Final Sales to Domestic Purchasers or "GDP-FSDP"), then the TFP value of -1.41% would yield an X factor of -2.05% (See Figure 34 of CLP-PBR-2). Please refer to Table 1 below, which summarizes the annual incremental revenue increases resulting from I-X-CD assuming inflation with x = -2.05 as compared to inflation with x = 0. For illustrative purposes, the Company relied on a Moody's forecast of inflation that results in 2.2% inflation for 2027, reflected in the Rate Year 2 increase shown, 1.6% in 2028 (for Rate Year 3), and 1.2% in 2029 (for Rate Year 4). Note that actual annual PBR filings rely on historical published values of inflation, not projected. Projections are utilized here strictly for analytical purposes.

CLF-AC-017(b) Table 1

	Annual Incremental Revenue ($ Millions)		
	I-X, x=-2.05	I-X, x=0	Difference
Rate Year 2, eff. 7/1/28	$76	$37	$39
Rate Year 3, eff. 7/1/29	$67	$26	$41
Rate Year 4, eff. 7/1/30	$61	$18	$43

Please refer to CLF-AFC-017, Attachment 1.

Date Filed: October 15, 2026

Witness: Julia Frayer
Request from: CLF and Acadia Center

Question:

(Productivity Factor) Refer to Exhibit CLP-PBR-2, p. 12, and the Study's use of "number of customers" as the output metric in the index method. Explain why the Study uses number of customers as the output metric, and state whether the Company agrees that growth in customer count is not a goal the Company can materially influence, depend upon, or utilize as a justification for seeking an increased revenue requirement.

Response:

Exhibit CLP-PBR-1, pp. 34–36 discusses the reasons for using the number of customers served as the output metric in LEI's Industry TFP Study. Customers served are commonly used as the output metric in TFP studies of the electric distribution industry. The goal of a TFP study is to identify output in physical unit terms. The use of Customer count fits this requirement. Customer counts are objective, consistently defined, and readily available across EDCs, allowing for meaningful comparison over time and aggregation across utilities. In contrast, electricity sales can be materially affected by factors largely outside a utility's control, including weather, economic activity, changes in customer usage, electrification, and the addition of large loads. Changes in electricity sales therefore do not necessarily reflect changes in an EDC's underlying productivity. In addition, EDCs invest in and maintain distribution infrastructure to provide customers with safe and reliable access to electricity and sufficient capacity to meet system demand, rather than to deliver a specific volume of electricity over the course of a year. Accordingly, LEI determined that the number of customers served provides a stable and comparable measure of the scale of distribution service for purposes of measuring industry productivity.

The Company agrees that growth in customer count is largely driven by factors outside the Company's control and that customer count growth, by itself, is not a justification for seeking an increased revenue requirement. The use of customer count in LEI's Industry TFP Study is intended to measure productivity trends; it is not intended to be interpreted as a business objective, where increasing the number of customers is a Company goal or, standing alone, a basis for increasing the Company's revenue requirement.

Date Filed: October 16, 2026

Witness: Donald J. Scacco Jr., Digaunto Chatterjee, Douglas P. Horton and Julia Frayer
Request from: CLF and Acadia Center

Question:

(Productivity Factor) Please refer to the Company's cost-of-service/rate-base-driven earnings model.

a) Explain why a capital-expense-based productivity factor calculated against customer growth is an appropriate basis for setting the revenue cap, given that the Company earns a return on capital additions to rate base regardless of whether customer count increases.
b) State whether the Company agrees that it has a financial incentive to increase capital spending independent of customer growth. If not, please explain the basis for disagreement.

Response:

a) Although LEI's Industry TFP Study calculates both a total factor productivity ("TFP") trend and capital and OM&A partial factor productivity ("PFP") trends, the Company is not proposing to use the TFP, nor the capital PFP, under its proposed revenue adjustment mechanism. The Company's proposed X Factor is based on the industry OM&A PFP and applies only to the OM&A component of the Company's revenue requirement. Capital costs are addressed separately through the Company's proposed capital funding mechanism.

   LEI uses customer count as the output measure in calculating OM&A PFP because it provides an objective, consistently defined, and comparable measure of physical output of electric distribution utilities over time. Please refer to the Company's response to CLF-AC-018[i]. The use of customer count as the output metric does not mean that customer growth is a prerequisite for recovery of costs or that capital investment must be directly caused by customer-count growth. Rather, the OM&A PFP measures how the quantity of operating inputs required to provide distribution service has changed over time relative to the quantity of outputs (customer count).

b) The Company does not agree it has an incentive to increase capital spending irrespective of system needs or customer growth. Capital investment is required for myriad reasons other than growth in customer count, including replacement of aging infrastructure, reliability, resiliency, safety, and public policy (for example, electrification, integration of distributed resources, and other evolving system and regulatory requirements). The Company has no financial incentive to invest capital that is not necessary in its obligation to safely and reliably serve its customers.

Prior Referenced Response

[i] CLF-AC-018 Question

(Productivity Factor) Refer to Exhibit CLP-PBR-2, p. 12, and the Study's use of "number of customers" as the output metric in the index method. Explain why the Study uses number of customers as the output metric, and state whether the Company agrees that growth in customer count is not a goal the Company can materially influence, depend upon, or utilize as a justification for seeking an increased revenue requirement.

CLF-AC-018 Response

Exhibit CLP-PBR-1, pp. 34–36 discusses the reasons for using the number of customers served as the output metric in LEI's Industry TFP Study. Customers served are commonly used as the output metric in TFP studies of the electric distribution industry. The goal of a TFP study is to identify output in physical unit terms. The use of Customer count fits this requirement. Customer counts are objective, consistently defined, and readily available across EDCs, allowing for meaningful comparison over time and aggregation across utilities. In contrast, electricity sales can be materially affected by factors largely outside a utility's control, including weather, economic activity, changes in customer usage, electrification, and the addition of large loads. Changes in electricity sales therefore do not necessarily reflect changes in an EDC's underlying productivity. In addition, EDCs invest in and maintain distribution infrastructure to provide customers with safe and reliable access to electricity and sufficient capacity to meet system demand, rather than to deliver a specific volume of electricity over the course of a year. Accordingly, LEI determined that the number of customers served provides a stable and comparable measure of the scale of distribution service for purposes of measuring industry productivity.

The Company agrees that growth in customer count is largely driven by factors outside the Company's control and that customer count growth, by itself, is not a justification for seeking an increased revenue requirement. The use of customer count in LEI's Industry TFP Study is intended to measure productivity trends; it is not intended to be interpreted as a business objective, where increasing the number of customers is a Company goal or, standing alone, a basis for increasing the Company's revenue requirement.

Date Filed: October 16, 2026

Witness: Julia Frayer
Request from: CLF and Acadia Center

Question:

(Productivity Factor) Refer to Exhibit CLP-PBR-2, Figure 3, page 13; the U.S. Bureau of Labor Statistics' Total Factor Productivity ("TFP") data for the "private business sector" (https://www.bls.gov/productivity/tables/, "Total factor productivity by major sectors: private business and private nonfarm business"); and Exhibit CLP-PBR-2, Section 2.5 (productivity factor formula).

a) Explain whether the Company or LEI considered using the private business sector TFP series as the basis, or a cross-check, for the productivity factor in this proceeding, and if considered as the productivity factor for the Company in the rate case and rejected, please explain why.
b) Please state whether the Company believes a private business sector TFP more closely approximates the productivity gains a utility could achieve if it were financially incentivized to reduce costs as if its rate of return was unregulated (i.e. as if it were a private corporation). If the Company does not agree with this position, please state why.
c) Quantify the productivity factor that would result from applying the private business sector TFP series over the same study period, and compare it to the blended/total TFP factor derived from the Study's chosen methodology.
d) Applying the Section 2.5 formula to the BLS TFP data for the private business sector, confirm or refute that average productivity growth over the 2005-2024 period is approximately 0.678%. If the Company's calculation differs, please provide the calculation and explain the discrepancy.
e) State whether the Company will produce all raw data, assumptions, and calculations underlying the Study's recommended productivity factor, sufficient for intervenors' experts to independently verify and stress-test the result. If not, please explain why not.

Response:

a) LEI's Industry TFP Study did not rely on the BLS total factor productivity ("TFP") series for the private business sector as the basis for, or as a cross-check of, the electric distribution industry productivity study that LEI performed because the scope of the BLS measure is materially broader than the electric distribution industry examined in the Industry TFP Study.

The BLS private business sector TFP series is an economy-wide measure of productivity that encompasses a broad range of private-sector economic activities. BLS divides the

private business sector into four broad sectors: (1) goods producing; (2) information and communication technology ("ICT"); (3) finance, insurance, and real estate ("FIRE"); and (4) service providing sector.[1] These sectors encompass industries including agriculture, mining, utilities, construction, manufacturing, trade, transportation and warehousing, information, finance and insurance, real estate, and numerous service industries.

Utilities (NAICS 22) are only one industry within the goods-producing component of the private business sector. Moreover, as explained in response to CLF-AC-16, the BLS Utilities industry itself is broader than the electric distribution activity examined in LEI's Industry TFP Study. Utilities (NAICS 22) include electric power, natural gas, steam supply, water supply, and sewage removal, while the electric-power component includes generation, transmission, and distribution. By comparison, LEI's Industry TFP Study focuses on electric distribution, a narrower activity classified under NAICS 221122.

Accordingly, the BLS private business sector TFP measure reflects productivity changes across a wide range of economic activities outside the scope of the Study, which may have materially different technologies, cost structures, input requirements, and productivity drivers. Indeed, the private business sector is broader than the BLS Utilities TFP series discussed in response to CLF-AC-16, which would also not have been an appropriate comparison to the electric distribution industry examined in LEI's Industry TFP Study.

b) The Company does not agree that the BLS private business sector TFP more closely approximates the productivity gains an electric distribution utility could achieve if it were financially incentivized to reduce costs as if its rate of return were unregulated. The productivity opportunities available to an electric distribution utility depend on the activities it performs, the outputs it provides, and the inputs required to provide those outputs. Changing the financial incentive to reduce costs does not make the technologies, operations, or input requirements of unrelated private-sector industries representative of those of an electric distribution utility.

As discussed in response to part (a), the BLS private business sector includes a broad range of industries whose activities and productivity drivers differ materially from electric distribution. By contrast, LEI's TFP Industry Study measures productivity based on the experience of electric distribution companies and therefore reflects productivity opportunities associated with providing electric distribution service. Accordingly, the Company does not believe the private business sector TFP is a more appropriate measure of achievable productivity solely because private businesses may face stronger financial incentives to reduce costs.

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1 BLS. *Total Factor Productivity for Major Industries – 2024*. 2024. P. 3.

c) Applying the growth-rate methodology described in Section 2.5 of LEI's Industry TFP Study to the BLS private business sector TFP series over the 2005–2024 period results in average annual TFP growth of approximately 0.678%.

By comparison, LEI's Industry TFP Study estimates average total TFP growth for the electric distribution industry of approximately -1.41% over the 2005–2024 study period. Thus, the BLS private business sector TFP growth rate is approximately 2.09 percentage points higher than LEI's electric distribution industry TFP growth rate.

This numerical comparison should not, however, be interpreted as a like-for-like comparison or as an alternative estimate of the productivity factor proposed by the Company. The BLS private business sector series is an economy-wide value-added TFP measure based on real value-added output and combined capital and labor inputs. LEI's Industry TFP Study, by contrast, measures productivity specifically for electric distribution companies using the outputs and inputs defined in the Study. In addition, the productivity factor proposed for the Company's OM&A revenue adjustment mechanism is based on OM&A PFP, rather than the TFP. Accordingly, the BLS private business sector TFP result does not provide an alternative estimate of the OM&A productivity factor used in the Company's proposed plan.

d) LEI confirms that using the formula shown in Figure 8 of Section 2.5 of LEI's Industry TFP Study to the BLS TFP data ("Total factor productivity by major sectors: private business and private nonfarm business") results in 0.678% average growth rate. However, this data is not related to the electric distribution industry and therefore should not be used to set the productivity factor for the Company's proposed plan.

e) Subject to the execution of an appropriate confidentiality agreement, LEI will provide CLF with a study-specific version of the model containing the underlying data, assumptions, formulas, and calculations relied upon to derive the recommended productivity factor.