

PUBLIC UTILITIES COMMISSION

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June 26, 2019

VIA ELECTRONIC DELIVERY

Ms. Kimberly D. Bose
Office of the Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A, East
Washington, D.C. 20426

Re: *Inquiry Regarding the Commission's Policy for Determining Return on Equity*
Docket No. PL19-4-000

Dear Ms. Bose:

Enclosed for filing in the above-docketed case, please find an original electronic filing of the attached document entitled "**NOTICE OF INTERVENTION AND COMMENTS OF THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA.**"

Thank you for your cooperation in this matter.

Sincerely,

/s/ *CANDACE MOREY*

CANDACE MOREY
Attorney

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Inquiry Regarding the Commission's
Policy for Determining Return on Equity

Docket No. PL19-4-000

**NOTICE OF INTERVENTION AND COMMENTS
OF THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

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Pursuant to Rule 214(a) of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“Commission” or “FERC”), and the Commission’s March 21, 2019 Notice of Inquiry *Regarding the Commission’s Electric Transmission Incentives Policy* (“ROE NOI”) in the above-captioned docket,¹ the Public Utilities Commission of the State of California (“CPUC”) submits this Notice of Intervention and these Opening Comments on the Commission’s policies for determining return on equity following the decision of the U.S. Court of Appeals for the District of Columbia Circuit in *Emera Maine v. Federal Energy Regulatory Commission*.² The CPUC submits these comments on behalf of itself and the People of the State of California.

I. NOTICE OF INTERVENTION

The CPUC is a constitutionally-established agency charged with responsibility for regulating electric and natural gas corporations in the State of California. In addition, the CPUC has a statutory mandate to represent the interests of electric and natural gas consumers throughout California in proceedings before the Commission. This Notice of Intervention serves to make the CPUC a party to this proceeding.

Communications to the CPUC in this proceeding should be addressed to:

¹ *Inquiry Regarding the Commission’s Policy for Determining Return on Equity*, 166 FERC ¶ 61,207 (March 21, 2019) (“ROE NOI”).

² 854 F.3d 9 (D.C. Cir. 2017) (“*Emera Maine*”).

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II. COMMENTS

The CPUC welcomes the opportunity to comment on the FERC's ROE policies, particularly because of their "potentially significant and widespread effect" upon public utilities, which FERC has observed,³ as well as consumers. But several aspects of FERC's proposed new methodology to determine Transmission Owner ("TO") authorized Returns on Equity ("ROEs") are particularly concerning to the CPUC. While FERC's ROE NOI does not expressly propose modifying ROE policies to require their

³ ROE NOI, 166 FERC ¶ 61,207 at P 3.

cookbook application in all TO rate cases,⁴ actions at FERC are trending that direction. FERC has already required parties in other proceedings to apply the new ROE methodology, which has been described in orders on remand from *Emera Maine*.⁵ FERC has now issued the instant ROE NOI to “provide all interested stakeholders with the opportunity to comment on the Commission’s ROE policy in light of the decision in *Emera Maine*.”⁶

The CPUC has carefully considered FERC’s proposed new methodology and urges FERC to maintain the existing ROE methodology at this time, rather than upending its decades-old policy of relying on the well-established Discounted Cash Flow (“DCF”) financial model. The CPUC respectfully recommends that FERC continue to focus on the existing DCF-focused ROE policy while taking steps to expand its discretion to consider the alternative Capital Asset Pricing Model (“CAPM”) and Risk Premium (“RPM”) financial models. FERC should not further pursue changes to the ROE methodology proposed in the *Coakley* Briefing Order, however, absent a comprehensive review of how this approach will affect ratepayers if adopted as a broad policy. This analysis should be based on evidence of how results from the CAPM and RPM models

⁴ ROE NOI, 166 FERC ¶ 61,207 at P 28 (FERC opened the public inquiry seeking comments on “potential modifications to our approach to determining a just and reasonable ROE”).

⁵ See *Martha Coakley v. Bangor Hydro-Elec. Co.*, 165 FERC ¶ 61,030 at P 19 (2018) (“*Coakley* Briefing Order”) (outlining a new approach reflecting FERC’s proposed policy for addressing ROE issues in the future, including in currently pending proceedings). See also, e.g., *Arkansas PUC et. al*, 165 FERC ¶ 61,119 P 5-6 (November 15, 2018) (complaint proceeding under section 206 of the Federal Power Act (“FPA”), 16 U.S.C. § 824e), *Entergy Arkansas, Inc. et. al*, 167 FERC ¶ 61,091 at P 16 (April 30, 2019) (directing additional briefs in proceeding under FPA section 205, 16 U.S.C. § 824d, following an ALJ Initial Decision issued May 12, 2015 that applied the two-step DCF methodology).

⁶ ROE NOI, 166 FERC ¶ 61,207 at P 28.

affect ROEs, applied in practice where they can serve as a check on the results from the DCF model. FERC should not utilize results from the Expected Earnings model at all to inform ROE determinations at this time, because it is an accounting-based model that does not provide a measure the utility's cost of capital.

Currently, neither FERC nor parties to TO rate cases have sufficient experience to understand how the significant change to ROE determinations could affect rates, customers, and the economy. There is also no need to rush a change to ROE policy, because there is no evidence suggesting that FERC-authorized ROEs based on the DCF financial model have proven insufficient for TOs to meet the capital attraction standard articulated by the Supreme Court in the *Hope* and *Bluefield* decisions.⁷ To the contrary, the evidence presented in these comments demonstrates that electric utilities remain attractive investments. If it is widely adopted as policy, the proposed *Coakley* ROE methodology could have unnecessary and significant detrimental economic impacts on the customers of the TOs, including California's ratepayers. In summary, the CPUC recommends the following actions in response to FERC's ROE NOI:

- ... FERC should continue to presumptively use the DCF model results to establish the zone of reasonableness and the just and reasonable placement of ROE within the zone;
- ... FERC should consider the CAPM and RPM model results only to inform and corroborate the just and reasonable placement of ROE within the zone, and not to calculate the point value authorized ROE;

⁷ *FPC v. Hope Nat. Gas Co.*, 320 U.S. 591 (1944); *Bluefield Waterworks v. Pub. Serv. Comm'n of W.V.*, 262 U.S. 679 (1923). See *Coakley* Briefing Order, 165 FERC ¶ 61,030 at n.11 (explaining the capital attraction standard set forth in these two Supreme Court cases).

- ... FERC should exclude Expected Earnings entirely from the ROE analysis and determination (*i.e.*, from the development of a composite zone of presumptive reasonableness and from determining the just and reasonable ROE);
- ... FERC should consider arguments and evidence, on the merits presented under the circumstances of a particular case, that an existing utility ROE has become unjust and unreasonable and not simply dismiss a complaint outright if the ROE falls within the composite zone of reasonableness⁸ quartile for a like-risk utility;
- ... FERC should allow parties to argue whether alternative financial models to the DCF should be afforded any weight based on the unique facts and circumstances of the case, rather than requiring a formulaic approach to calculating the just and reasonable ROE; and
- ... FERC should revisit at a future time whether a more sweeping ROE policy modification is needed, based on evidence of how the alternative cost of equity models impact ROE determinations and thus affect costs to consumers.

The CPUC offers general comments urging FERC to adopt a more gradual modification to ROE methodology—applying its expertise based on the unique facts and evidence presented in individual cases—rather than imposing an abrupt policy shift requiring rigid application of a new ROE formula in all cases. The CPUC has also indicated in footnote references where the general comments are also responsive to specific questions posed in the ROE NOI and reserves the right to address additional questions in Reply Comments.

⁸ The “composite zone of reasonableness” refers to range of ROEs that will result from FERC’s proposed method of averaging the top- and bottom- results from the DCF, CAPM, and Expected Earnings models to form the presumptive zone (and quartiles within the zone) to screen section 206 challenges.

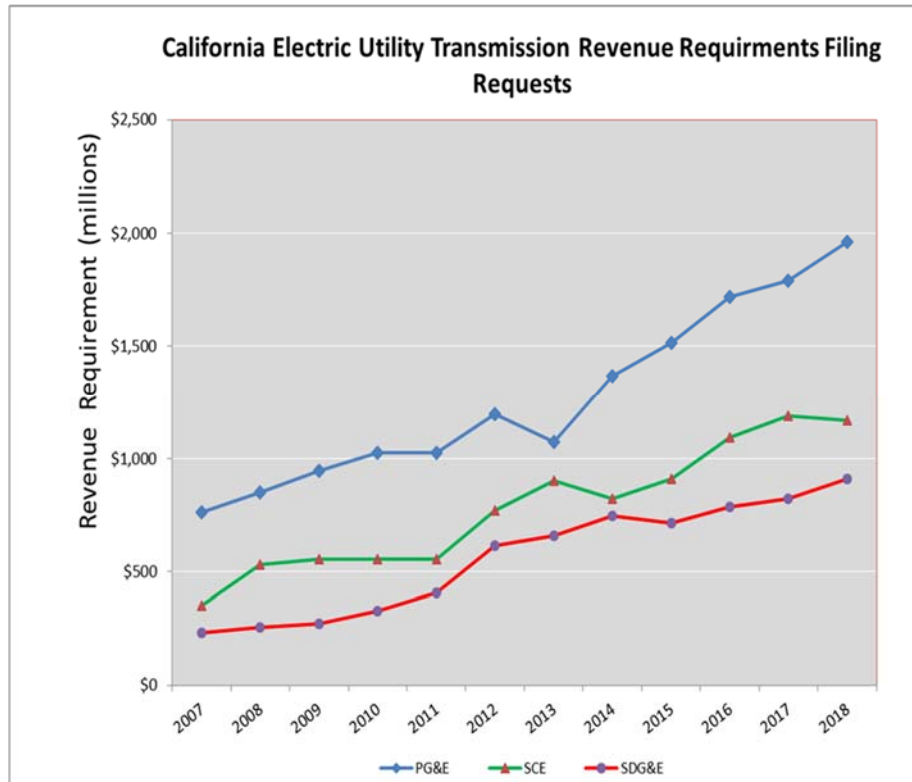
A. FERC should not adopt the *Coakley* ROE methodology as a policy decision, given the absence of any evidence on how it will affect customers.

The *Coakley* Briefing Order and ROE NOI posit a dramatic departure from decades of sole reliance on the well-established DCF model, yet FERC has provided no studies or evidence demonstrating how such policy change could affect ROEs or impact consumers. “The ROE zone of reasonableness is intended to balance the interests of investors and consumers.”² But FERC’s stated rationales for changing the ROE focus exclusively on investors, with no balancing of the interests of consumers. While FERC’s new ROE math may appear simple in the abstract, it will have real and potentially serious economic consequences for consumers. FERC should not force a change to the ROE methodology in TO rate cases absent a robust analysis of real-world data showing how the change will affect transmission costs *and* proof that utilities need ROE’s to be systemically higher than what the DCF model produces to provide fair compensation, maintain credit strength, and attract needed investment capital.

California’s ratepayers have already experienced significant increases in transmission revenue requirements (“TRRs”) requested by the state’s investor-owned electric utilities over the past 10 years, even as electricity demand has remained flat. The annualized TRR requested by California’s IOUs has more than doubled during the past a decade, as shown in the figure below:¹⁰

² *Emera Maine*, 854 F.3d at 21.

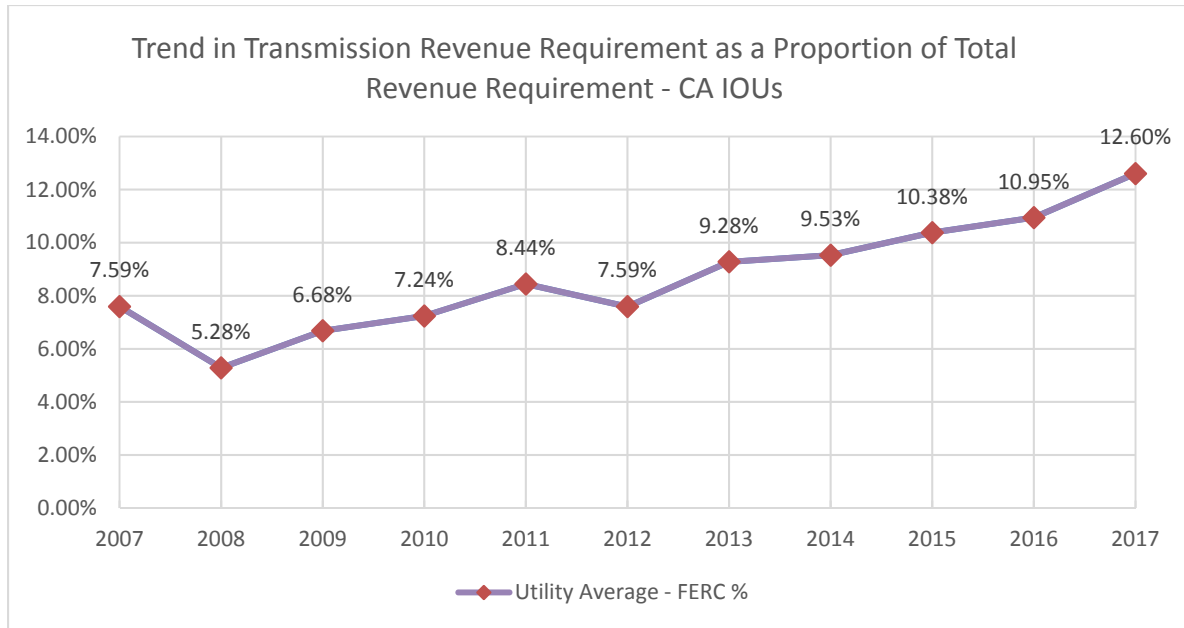
¹⁰ Source data derived from FERC online docket information for: PG&E’s rate cases for TO10 through TO20, beginning with ER07-1213 through ER19-13; SCE’s rate cases for TO3 through TO2018 rate cases, beginning with ER06-186 through its ER18-169; and SG&E’s rate cases for



This growth in the FERC-jurisdictional transmission revenue requirement is outstripping increases of components of the overall utility revenue requirement (including generation and distribution), as shown in the figure below.¹¹

TO3 CYC1 through TO5 CYC1, beginning with ER07-284 through ER19-221, available through https://elibrary.ferc.gov/idmws/docket_search.asp.

¹¹ Percentages derived from the Total Actual Revenue Requirement reported by each utility noted. Source: CPUC Energy Division Data Request 06/17; Available at <https://www.cpuc.ca.gov/General.aspx?id=12070>.



This trend is significant since a rise in TRR inevitably means that Transmission Access Charge (“TAC”) rates will also rise. Indeed, because the California Independent System Operator (“CAISO”) develops TAC rates primarily from FERC-approved TRRs, rates that customers pay for the transmission portion of their electric bills have also been rising, as demonstrated in the table below:¹²

Table 4 - Historic volumetric HV-TRR rates

Year	Filed Annual HV-TRR (\$)	Filed Annual Gross Load (MWh)	Volumetric TAC Rate (\$/MWh)	ISO Annual Peak Load (MW)
2012	1,331,131,427	208,203,435	\$ 6.3934	46,846
2013	1,718,985,660	209,747,674	\$ 8.1955	45,097
2014	1,695,601,699	211,699,031	\$ 8.0095	45,089
2015	1,999,620,213	212,120,690	\$ 9.4268	46,519
2016	2,195,146,895	211,289,953	\$ 10.3893	46,232
2017	2,165,294,596	209,260,146	\$ 10.3474	49,900

¹² Data from California Independent System Operator, Transmission Access Charge Structure Enhancements, Second Revised Straw Proposal – Review Transmission Access Charge Structure, June 22, 2018, Table 4, p. 17. Available at: <http://www.caiso.com/Documents/SecondRevisedStrawProposal-ReviewTransmissionAccessChargeStructure.pdf>.

At the same time, the CPUC's evaluation of a few proceedings in which FERC has begun to utilize the *Coakley* ROE methodology suggest that reliance on the Expected Earnings model results could produce systemic upward bias (skewing higher both the calculated just and reasonable (base) ROE and the total ROE (base plus incentives) as set by top of the zone of reasonableness, *see* section D, *infra*). This would cause a compounding detrimental increase on top of already rising costs. As the Supreme Court has noted, FERC's orders "must be measured as much by the success with which they protect [public] interests as by the effectiveness with which they maintain and attract capital."¹³ And "in addition to prohibiting rates so low as to be confiscatory, the holding of *Hope Natural Gas* makes clear that exploitative rates are illegal as well."¹⁴ By moving toward a cookbook approach to ROE determinations with no consideration of how the methodological change will systematically impact rates and consumers, FERC neglects its essential role in protecting the public interest.

Before making such a dramatic change to rate-setting that could compound pressures already pushing up costs, FERC should conduct more evidence-based analyses of how the inclusion of additional financial models, and specifically as the Expected Earnings, could affect transmission rates.

¹³ *In re Permian Basin Area Rate Cases*, 390 U.S. 747, 791 (1968).

¹⁴ *Jersey Cent. Power & Light Co. v. FERC*, 810 F.2d 1168, 1180 (D.C. Cir. 1987).

B. FERC has not provided adequate justification for implementing a new ROE methodology and there is no evidence that utilities require higher ROEs to attract capital.¹⁵

FERC has provided two justifications for the departure from its long-standing sole reliance on the DCF methodology in order to support a establishing the proposed new ROE policy. Initially, FERC cited “anomalous” capital market conditions, including “bond yields [that were] at historic lows” to justify its initial departure from sole reliance on the DCF methodology.¹⁶ Such market conditions of very low capital costs (by historical standards) are now the norm, not an anomaly.¹⁷ More recently, in the *Coakley* Briefing Order, FERC deemphasizes “anomalous markets” as the justification for the ROE policy change. FERC now asserts that its “primary reason” for proposing to average results from the four alternative models is that “*investors use those models, ... to inform their investment decisions.*”¹⁸ Even if investors make some use of these models (or the information provided by these methods), this is not new news. Neither rationale provides an adequate justification for FERC’s complete alteration of the ROE methodology.

¹⁵ This section includes information responsive to the ROE NOI, 166 FERC ¶ 61,207 section C (supporting the Commission’s continued use of the DCF model as the primary method it should use to evaluate utility cost of equity) and questions A1, A2, E1, F1, F2, F4, and H.1.4 where specified.

¹⁶ *Coakley* Briefing Order, 165 FERC ¶ 61,030 at P 4.

¹⁷ *Emera Maine* noted that the consumer challenge to the NETO’s base ROE, which was established in 2006, was “the first case of its kind” following the economic recession and financial crisis of 2007-2009. 854 F.3d at 17.

¹⁸ *Coakley* Briefing Order, 165 FERC ¶ 61,030 at P 44 (emphasis in original).

Any basis for changing the Commission’s long-standing ROE methodology, as a matter of FERC policy, should be fact-based and tied to the *Hope* and *Bluefield* standards, not a mere assertion that investors consider financial models in addition to the DCF model. “FERC bears the burden of explaining the reasonableness of any departure from a long-standing practice, and any facts underlying its explanation must be supported by substantial evidence.”¹⁹ Contrary to supporting a *departure* from the existing ROE policy, market data demonstrates that electric utilities are and have been attracting significant (and sufficient) investment capital, even as ROEs have been declining in the extended period of low interest and capital cost rates during the past decade. There are also strong financial-theory reasons for FERC to continue giving sole or predominant weight to the DCF model results and not discount it to a mere 25 percent of the ROE calculus under the proposed new ROE methodology.

1. FERC-authorized ROEs for utilities based on the DCF methodology are meeting the capital attraction standard.

Question F1 of the NOI asks “Does the mismatch between market-based ROE determinations and a book value rate base support current market values? Is this mismatch a problem?”²⁰ The CPUC urges FERC not to view its perceived mismatch between market-based ROE determinations and book value rate base as a problem. This is not an issue FERC should attempt to address through ROE determinations. Rather, it is an indicator of adequate ROE levels to meet the capital attraction standard.

¹⁹ *Pub. Serv. Comm’n of N.Y. v. FERC*, 813 F.2d 448, 451 (D.C. Cir. 1987).

²⁰ ROE NOI, 166 FERC ¶ 61,207 at P 36.

Instead of suggesting that recent FERC-authorized ROEs (set using the DCF results) have been insufficient to enable utilities to attract capital, there is abundant evidence demonstrate that electric utilities are generally thriving and attracting sufficient capital investment, from both individual investors and institutional investor groups.²¹ ROEs awarded to electric utilities by state commissions since the financial crisis of 2009 have been gradually declining in response to low capital costs and favorable conditions in financial markets from more than 10 percent prior to 2010 to approximately 9.5 to 10 percent in recent years. The table below shows the average electric utility ROE award in state rate cases since 2009.²²

<u>Year</u>	<u>ROE Award</u>
2010	10.37%
2011	10.29
2012	10.17
2013	10.03
2014	9.91
2015	9.85
2016	9.77
2017	9.74
2018	9.59

At the same time, objective information indicates that investors have a very favorable view of utility stocks and find them to be very attractive investments, even with

²¹ For example, American Electric Power Company, Inc. (ticker AEP) has over 75% of its shares in the hands for a variety of Institutional Investors (Source: Yahoo Finance, Holders Tab, AEP at <https://finance.yahoo.com/quote/AEP/holders?p=AEP>).

²² See “RRA Regulatory Focus Major Rate Case Decisions, January – December 2018,” at 8, Regulatory Research Associates, a unit of S&P Global Market Intelligence, January 31, 2019.

declining, often sub-10 percent ROE awards. For purposes of these comments, the CPUC evaluated three financial metrics for a proxy group of 32 electric utility companies (selected using FERC proxy group criteria) that explore whether the capital attraction standard, given these ROEs, is being met. These three measures are (1) the electric utility company market/book ratio, (2) the cumulative market return on investment (dividends plus capital gains) over the most recent five-year time period, and (3) the projected growth in net plant for the next five years. The first two metrics illustrate the behavior of investors concerning their willingness to purchase or hold utility common stock. The third metric is a measure of utility management's willingness (and ability) to invest in new plant and equipment, given the allowed ROEs approved by regulators in recent years. (The Appendix section at the end of these comments provides detail on the CPUC's analysis and company-by-company results).

For the 32 company proxy group the CPUC analyzed, the market/book ratio as of the second quarter 2019 averages 2.05.²³ This indicates that investors place a very high value on utility assets and that investors have bid up utility company share prices aggressively over the past several years. The five-year total market return metric tells a similar story. Over the most recent five years, the cumulative total market return has averaged about 83.1 percent for the proxy companies. This equates to an average annual return on investment in utility shares of nearly 12.9 percent, suggesting a high degree of

²³ Question F2 of the ROE NOI observes this trend as well, asking “[w]hy have most or all utility market-to-book ratios consistently exceeded one?” ROE NOI, 166 FERC ¶ 61,207 at P 36. Rather than suggesting an issue, this indicates that investors remain highly interested in utility stocks, as explained in this section.

investor satisfaction with the prevailing sub-10 percent ROE awards. The third measure, management's willingness to invest in new plant and equipment, indicates an expected increase over the next five years in net plant of 24.6 percent.²⁴ This outlook is consistent with statements from the Edison Electric Institute indicating that electric utility industry capital spending in recent years has been at record levels, and heavy capital spending is expected to continue.

Taken together, these data strongly suggest that prevailing ROE awards in recent years, while declining and low by historical standards, have not discouraged investor interest in utility stocks or aggressive capital spending by utility management. The information on investor behavior and capital attraction also further indicates that inordinately high accounting returns (which the Expected Earnings method appears to produce) would result in ROEs far above the levels needed to meet the capital attraction standard. As FERC's proposed methodology will only serve to improperly inflate ROEs and harm consumers, there is no basis for FERC to change its ROE methodology as a matter of policy. At most, FERC should continue to explore results in individual cases and consider if ROE results based on the DCF model are insufficient based on the unique circumstances relevant to individual utilities.

²⁴ Since the measure used here is the percent growth in net plant, and not gross plant, this indicates that total projected capital spending will be a 24.6 percent increase over and above the capital spending associated with the depreciation of existing plant.

2. The DCF Model remains highly relevant for estimating the cost of utility equity.

The DCF model remains particularly well-suited for estimating the cost of equity for broad industry groups of electric utility companies for several reasons.

First, the standard DCF model is the appropriate and practical cost of equity or return estimation tool for dividend paying stocks. Almost all publicly traded electric utility companies pay regular quarterly dividends on a consistent basis over time; dividend cuts or elimination for utilities are rare. The dividend yield, which is a large part of investor total market return for electric utilities and is used to calculate the DCF, is directly observable. By contrast, many unregulated publicly traded companies do not pay dividends on a regular basis, and thus for those companies, DCF model would not provide investors with an appropriate analytical tool.

Second, as compared with non-regulated companies, publicly traded utility companies tend to be highly stable in terms of their long-term earnings and dividend growth. This inherent stability is due to their status as regulated monopolies selling an essential product to the public – electricity service – in exclusive franchise service areas. There may be valid reasons investors would look less to the DCF model and more to alternatives models (such as the CAPM) for evaluating non-regulated and non-dividend paying companies. But that fact does not justify FERC’s proposal to severely discount the weight given to the DCF model results from the calculation of ROE for electric utility companies. The greater stability of utility company earnings and dividends supports ongoing reliance on the DCF model, even if other models and information are used by

investors to evaluate returns for non-regulated companies.

Third, the efficient market hypothesis remains highly relevant as a “theoretical mainstay” today,²⁵ especially for electric utilities due to their regulated status. The ROE NOI question H.1.4 asks, “[s]hould the Commission continue to rely on the efficient market hypothesis, which underlies the DCF and CAPM models?”²⁶ The answer is yes, and FERC has not offered any facts that justify a departure from its longstanding reliance on this assumption.

The efficient market hypothesis requires that investors have full access (and the same access for all investors) to information regarding the subject company (or companies) pertinent to the investment decision. This ensures that share prices, which reflect investor valuations, are rational and efficient. If anything, capital markets should be more efficient today in the age of the internet and information technology, not less efficient. Further, information about publicly traded electric utilities in particular is widely available and accessible. Due to their regulated status, electric utilities are highly transparent with respect to the information relevant to investors, including information on costs, financial performance, regulatory treatment, operations and future business or capital spending plans. Regulations and reporting requirements help ensure that this extensive information is made available to all investors, and thus it is promptly and

²⁵ See *Tenn. Gas Pipeline Co. v. FERC*, 926 F.2d 1206, 1211-1212 (D.C. Cir. 1991) (noting both that FERC “appears quite wedded to the DCF analysis and to the efficient market theory as its theoretical mainstay” and its defense that “[t]he concept of an efficient market is astonishingly simple and remarkably well supported by the facts.”)(quoting Order No. 461, 38 FERC ¶ 61,160, P 61,441-42 (1984)).

²⁶ ROE NOI, 166 FERC ¶ 61,207 at P38.

efficiently reflected in share prices. Moreover, the Commission’s procedures in applying the DCF model, such as the use of six months of share price data, the use of robust industry proxy groups, and the elimination of high or low “outliers” help to ensure that statistical “noise” does not distort the DCF results used to establish the ROE. FERC should continue to hold to its long-standing view that – at least for utility companies – the efficient market hypothesis provides a valid underpinning of the DCF model.

3. FERC’s proposed ROE methodology will decrease the predictability of ROE determinations.

In questions A1 and A2 of the ROE NOI, FERC asks “[t]o what extent would the ROE methodology described in the *Coakley* and MISO Briefing Orders impact the predictability of ROE determinations and the costs for market participants of making or intervening in such proceedings” and whether it will “affect an investor’s ability to forecast the ROE” established through litigated proceedings.²⁷ A shift to calculating ROE using multiple models will significantly decrease the predictability of ROE determinations and increase the costs for market participants to make and intervene in such proceedings.

Predictability will suffer and costs to participate in ROE determinations will increase if FERC changes the ROE methodology to average results from four models, for several reasons. Parties will have to litigate the assumptions and inputs of each of the for models, each of which is likely to be contested. In addition to disputes over the overall proxy group screening criteria, parties will dispute application of the high- or low-end

²⁷ ROE NOI, 166 FERC ¶ 61,207 at P31.

outlier tests to further screen results, and cut-points for screening high-end outliers may be particularly contentious for the Expected Earnings model. As a result of uncertainty on what assumptions FERC will adopt, each model will likely produce a disputed range of the potential zone of ROEs. FERC's proposal to then average the top- and low- end results from the three models to determine a composite zone of ROEs that includes high-, middle- and low- end quartiles will further compound the difficulties of predicting litigation outcomes. The proposed ROE methodology will inject significant new unpredictability in FERC's ROE determinations.

By contrast, the DCF model, which is a standard “yield plus growth” model, is particularly well-suited for use by regulators charged with both ensuring the financial stability of utilities and setting ROEs no higher than necessary to achieve just and reasonable returns. It is straightforward in application and intuitively understandable for the regulator and parties alike, and there is widespread agreement and understanding in the regulatory community that the standard DCF model is conceptually valid and solidly grounded in accepted financial theory. For this, and all of the reasons explained in this section, it is appropriate for FERC to continue sole or primary reliance on the very useful cost of equity tool – the DCF model – to support a stable and predictable regulatory environment for determining ROEs.

C. FERC’s proposal to use Expected Earnings is arbitrary because it is not a valid measure of the cost of equity and it will likely upward bias ROE results.²⁸

The Expected Earnings model is the least valid method of the four financial models that FERC proposes to now incorporate into ROE award determinations, and there is no justification to accord Expected Earnings information *equal weight* with the more traditional and accepted cost of capital models (DCF, CAPM and Risk Premium). FERC should not consider results from this model to calculate either a composite zone of reasonableness or the just and reasonable ROE point value.²⁹ At most, the Expected Earnings results should be limited to providing a reasonableness check that can help corroborate FERC’s location of the just and reasonable ROE within the range of potential ROEs derived from the cost of equity model evidence.

Based on the limited information to date, the CPUC’s analysis suggests that including the Expected Earnings results in the ROE methodology may systematically push ROE values up, because this method seems to generally produce a higher central and top-end of the range compared to the alternative cost of equity models. Admittedly, FERC and FERC practitioners’ experience using the Expected Earnings method is presently very limited. But FERC “must choose a method that entails an appropriate

²⁸ This section is responsive to ROE NOI Section E regarding financial model choice, and specifically question E3 (the CPUC explains why the Expected Earnings financial model is the most inferior model of the four discussed for estimating utility cost of capital) E7, and F3. 166 FERC ¶ 61,207.

²⁹ Question E7 of the ROE NOI asks “[i]f the Commission were to consider multiple models, how should it weigh them?” 166 FERC ¶ 61,207 at P36. The CPUC advocates for FERC to continue to rely solely on the DCF model to determine ROE, or primarily on the DCF with consideration given to the CAPM model results. At the very least it should not give *equal weight* to the Expected Earnings model.

‘balancing of the investor and the consumer interests,’”³⁰ and FERC owes a duty to consumers to explore both the theoretical benefits and limitations of this method before adopting a policy requiring its use in all ROE determinations. This is particularly important given the high presumption of validity that attaches to FERC’s ROE decisions.³¹

There are numerous reasons why this pure accounting measure is not considered a measure of the cost of equity (which is a market-based concept) and thus is not directly relevant to determining the ROE investors require for transmission owners.

1. The Expected Earnings method inappropriately departs from the long-accepted cost of equity standard used by regulators for setting the utility ROE.

The Expected Earnings method relies only on accounting data (as projected) and makes no use of market data, such as utility share prices or interest rates, which by contrast are used in the other financial models. Question F3 of the ROE NOI asks “[h]ow should the ROE level be set relative to the cost of equity?”³² Generally, the appropriate ROE awarded to utilities should be set *at* the cost of equity, meaning it is sufficient to meet the capital attraction standard – *i.e.*, adequate to *induce investors to hold or purchase* the utility’s common stock – and should not exceed that standard.³³ But

³⁰ *Morgan Stanley Capital Grp., Inc., v. Pub. Util. Dist. No. 1 of Snohomish Cty.*, 554 U.S. 527, 532 (2008) (quoting *FPC v. Hope Natural Gas Co.*, 320 U.S. at 603).

³¹ See *Permian Basin*, 390 U.S. at 767 (a presumption of validity attaches to each exercise of the Commission’s expertise).

³² ROE NOI, 166 FERC ¶ 61,207 at P 36.

³³ *Jersey Cent. Power & Light Co.*, 810 F.2d at 1180 (“An ROE that authorizes a utility to collect more than is necessary to satisfy the requirements of *Hope* and *Bluefield* will exploit consumers, and, therefore, be unjust and unreasonable.”)

because it uses no market data at all, the Expected Earnings model cannot measure the utility's market cost of equity. It essentially removes investor behavior from the ROE determination process, which is improper in the ROE calculus.

As the Commission itself states, the Expected Earnings method “provides an accounting-based approach that uses investment analyst estimates of return (net earnings) on book value. . .”³⁴ More specifically, the manner in which it has been used by the FERC and utility witnesses is to compile the accounting return on equity projections for the future three- to five- year time period published by Value Line for each utility company in the proxy group. Even FERC itself does not state that the Value Line projected accounting returns are a direct measure of the cost of equity, but merely that such published figures “are relevant to determining that utility's cost of equity.”³⁵

The CPUC does not dispute the notion that some investors may use and even find interesting the Value Line projections of utility company ROEs. But the notion that Expected Earnings is a direct measure of the cost of equity or investor requirements, and hence an appropriate standard for determining an ROE award to a utility, is incorrect. The accounting return to a utility and the return the investor expects to receive on her investment in utility shares (“the opportunity cost” of investing) simply are not the same thing, because investors generally cannot purchase the shares in the utility company at

³⁴ *Coakley* Briefing Order, 165 FERC ¶ 61,030 at P 34.

³⁵ *Id.*

book value.³⁶ As the CPUC's analysis of proxy electric utility companies demonstrates³⁷ investors have been willing to pay a very substantial premium over book value when purchasing utility shares at market value. This same premium prevails when the investor already owns the stock and merely decides to continue to hold those shares. Under these circumstances, it follows that the equity return published by Value Line exceeds the return an investor can expect to receive on the utility stock.

An investor's expected return on her investment in the utility is what matters for the ROE award, and therefore should guide FERC's assessments, not the utility's expected accounting return. For example, Value Line may project a utility accounting return of 12 percent (e.g. \$1.20 in earnings per share on book value of \$10). But if the investor must pay \$15 a share to purchase the equity, that represents a 50 percent premium over the book value. The investor will not expect to earn a 12 percent return, and in this example the investor perceives the company as earning \$1.20 on his \$15 share price investment which equates to only an 8 percent expected return. The long-established market cost of equity standard for setting utility ROEs is part and parcel of cost-based ratemaking, and only models that rely on market data can provide a true cost of equity determination. Because the Expected Earnings method removes the investor and investor behavior from the central role in setting the fair utility ROE, it is an improper model to utilize for setting ROE.

³⁶ As shown in Appendix A, only one of the 32 proxy companies has a market to book ratio close to 1.0. It should be noted that in past decades (e.g., in the 1980s) electric utilities were regarded as less attractive investments with market-to-book ratios closer to 1.0 than at present.

³⁷ See section B.1 *supra*.

2. Expected Earnings is limited in value because it relies on very narrow and uncorroborated data sources.

The Expected Earnings model should be given no weight (and in any case not equal weight) because, unlike the alternative financial models, it relies on an extremely narrow and uncorroborated source of data. Standard cost of equity models incorporate data inputs from a variety of market and non-market sources. For example, the DCF model uses actual, observed share price data and per share dividends (as published by numerous public sources), IBES survey of earnings growth rates (and other potential growth rate sources are suggested in the NOI), and long-term U.S. GDP growth rates. To some degree the use of actual market and other data from potentially diverse sources are also used in the CAPM and Risk Premium methods. By comparison, the Expected Earnings method, as used in cases before FERC, is very narrowly restricted to one publication as the exclusive source for all data inputs – Value Line.

The unique narrowness of the data set used in Expected Earnings is concerning. It appears that no source other than Value Line is used because there is no other publication that provides projections of utility accounting ROEs. Further, Value Line data projections rely on a single analyst for each company. The resulting Value Line Expected Earnings figures are entirely projections with no actual, observable data. The risk is high of introducing “model error” by relying on a single analyst’s projection, with no ability to corroborate model inputs or assumptions from other sources. For this reason, too, it is improper for FERC to accord Expected Earnings equal weight with the other three models that utilize both actual data and more robust data sets.

3. Expected Earnings is more sensitive to one-time accounting adjustments and thus is more sensitive to distortions.

The Expected Earnings model is also a less robust method for estimating utility cost of equity compared to alternative models because the projected accounting ROEs for individual utilities may be easily distorted by accounting write ups or write downs to common equity. Value Line is unlikely to reflect prospective accounting changes in its projection of book *equity* because future, going forward accounting changes cannot be predicted. But the projected book *value* for a utility company can be altered by an accounting write up or write down that has occurred in the past. Accounting changes to the equity balance can then distort the meaning of the projected accounting return on equity. By contrast, the other financial models are less susceptible to distortions caused by one-time or unique accounting events, because they are fundamentally based on market and not accounting data.

As an example, the CPUC notes that in recently filed testimony in Southern California Edison Company's ("SCE's") TO-2019A case, pending before FERC, the Expected Earnings analysis provides a projected accounting return on equity for one of the proxy electric utilities, FirstEnergy Corporation, of 17.15 percent. While no explanation is provided for this unusually high accounting return, it is likely due to very large write downs to book equity associated with that company's unregulated merchant generation fleet. The accounting write down reduces the book value denominator in the ROE calculation and mechanically raises the published ROE figure. Although SCE's witness eliminated the highly distorted FirstEnergy figure as an outlier, other book equity

distortions can occur in Expected Earnings analyses that are not sufficiently large (in either direction) to warrant exclusion under the outlier standard used by FERC. For this reason, the validity of the reported ROE values published by Value Line are questionable, even as measures of accounting returns, and should not be accepted at face value.

4. The Expected Earnings results appears to systematically increase ROE values compared to other models.

Although based on limited information at this time, the CPUC's analysis suggests that including the Expected Earnings model results in the ROE methodology could systematically push ROE values up to an unjustified inflated level and that the impact of including Expected Earnings will be even *greater* relative to a policy change that averages just the CAPM and DCF models.³⁸ Including the Expected Earnings model appears to increase both the central tendency result (median or midpoint) as well as the top end of the zone of reasonableness, compared both to the DCF model alone and a composite giving equal weight to the DCF and CAPM models. “[M]ere economic theory may not take the place of record evidence and reasoned decision-making.”³⁹ Even with potential theoretical justifications that support using *more* models in making an ROE determination, FERC cannot not sanction use of this method in standard ratemaking cases if its inclusion results in ROEs that are not just and reasonable.⁴⁰

³⁸ The CPUC urges FERC to not give equal weight to the CAPM model either, but to consider whether the CAPM model corroborates other evidence on the appropriate ROE. The CPUC objects less to use of the CAPM model, however, because it is at least a well-used and market-based measure of the cost of equity, in contrast to the Expected Earnings method.

³⁹ *Elec. Consumers Resource Council v. FERC.*, 747 F.2d 1511, 1517 (D.C. Cir. 1984)

⁴⁰ *See Jersey Cent. Power & Light Co.*, 810 F.2d at 1177-78 (“In reviewing a rate order courts must determine whether or not the end result of that order constitutes a reasonable balancing,

The CPUC evaluated how FERC’s proposed methodology change would increase the ROE for SCE (based on its current pending TO-2019A⁴¹), PG&E (based on an ALJ Initial Decision issued in the TO-18⁴²), and the NETOs (based on the *Coakley* Briefing Order⁴³). As shown in the figures and tables below giving equal weight to the Expected Earnings results has the greatest impact driving ROE upwards compared to FERC’s longstanding policy of relying solely on the DCF model, or giving equal weight to DCF and CAPM, or even equally weighting the DCF, CAPM, and RPM results. Any upward bias to ROE’s resulting from FERC’s new proposed methodology will hurt consumers, as even small changes to the base ROE can have significant cost impacts. For example, just a 50-basis point increase to ROE will increase transmission revenue requirements by approximately \$30.7 million for PG&E,⁴⁴ \$26.3 million for SCE,⁴⁵ and \$17 million for

based on factual findings, of the investor interest in maintaining financial integrity and access to capital markets and the consumer interest in being charged non-exploitative rates. Moreover, an order cannot be justified simply by a showing that each of the choices underlying it was reasonable; those choices must still add up to a reasonable result.”); *See also Permian Basin*, 390 U.S. at 791 (“The Commission cannot confine its inquiries either to the computation of costs of service or to conjectures about the prospective responses of the capital market; it is instead obligated at each step of its regulatory process to assess the requirements of the broad public interests entrusted to its protection by congress.”).

⁴¹ *Notice of Intervention, Protest, Request for Hearing, Request for Five-Month Suspension and Reservation of Rights of the Cal. Pub. Utils. Comm’n*, filed in Southern California Edison Company, Docket No. ER19-1553-000 (May 2, 2019) at 20 (Table A-1)(based on CAPM results not size adjusted).

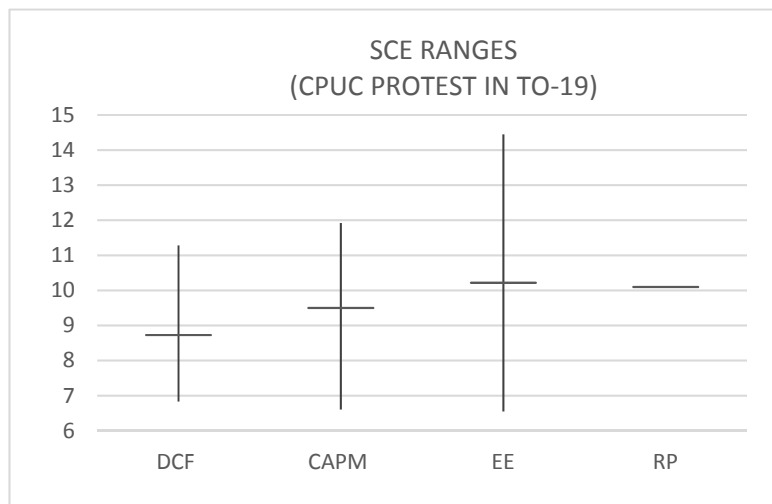
⁴² *Pacific Gas and Elec. Co.*, 165 FERC ¶ 63,001, PP 27, 41, 67-68, 94 (2018). The CPUC does not agree with or endorse these values but includes them here for illustrative purposes only.

⁴³ *Coakley* Briefing Order, 165 FERC ¶ 61,030, PP 56-59. The CPUC does not agree with or endorse these values but includes them here for illustrative purposes only.

⁴⁴ Estimate based on the results of PG&E formula rate sheet in ER19-13-000. *See Pacific Gas and Electric Company submits tariff filing per 35.13(a)(1): Transmission Owner Rate Case TO20 Formula to be effective 12/1/2018 under ER19-13*, PGE-0023 Pt 2 Populated Model (Excel) (Filed: 10/1/2018). Available at https://elibrary.ferc.gov/idmws/file_list.asp?document_id=14708449

⁴⁵ Estimate based on SCE Data Response in ER18-169-000. *See Southern California Edison Company submits tariff filing per 35.13(a)(1): SCE Transmission Owner Tariff Formula Rate*

SDG&E.⁴⁶ Thus, if the new methodology increased total (base plus adder) ROEs to the top of these zones of reasonableness, SCE costs would increase \$66 million per year,⁴⁷ and PG&E's \$135 million per year,⁴⁸ relative to FERC's longstanding practice of relying on the DCF model results.



Increase in ROE versus current method (DCF only)

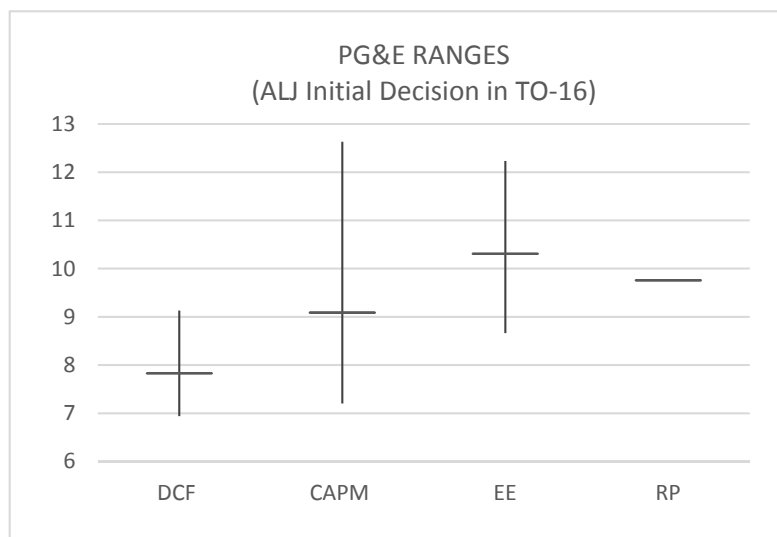
Average of:	% increase (cumulative)	
	Median	Top of Zone
DCF + CAPM	4%	3%
DCF + CAPM + EE	9%	11%
DCF + CAPM + EE + RP	10%	

Filing (TO2019A) to be effective 6/12/2019 under ER19-1553, Exh. SCE-4 EXCEL Formula (Filed: 4/11/2019). Available at https://elibrary.ferc.gov/idmws/file_list.asp?document_id=14759974

⁴⁶ Estimate based on results from SDG&E Formula Rate Spreadsheet in ER19-221-000. *See San Diego Gas & Electric Company submits tariff filing per 35.13(a)(1): TO5 Formula Tariff Filing to be effective 1/1/2019 under ER19-221, TO5 C1 Formula Rate Spreadsheet.XLSX.* (Filed: 10/30/2018). Available at https://elibrary.ferc.gov/idmws/file_list.asp?document_id=14716103

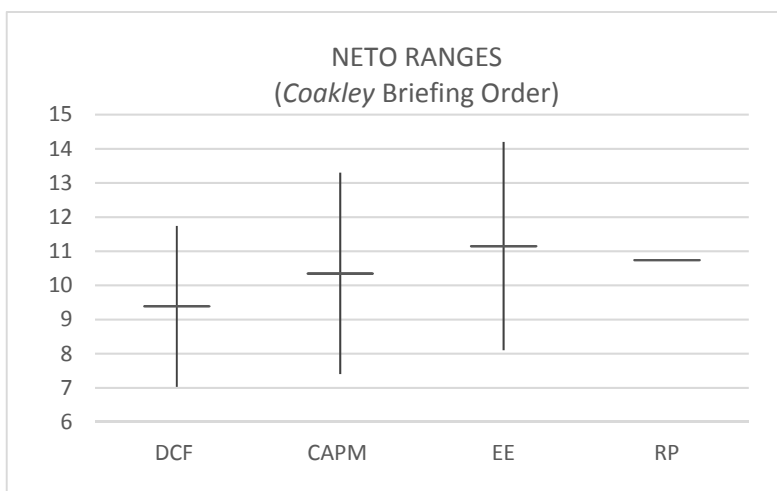
⁴⁷ Based on a total increase of 127 basis points to the top end of the composite zone relative to DCF only.

⁴⁸ Based on a total increase of 220 basis points to the top end of the composite zone relative to DCF only.



Increase in ROE versus current method (DCF only)

Average of:	% increase (cumulative)	
	Median	Top of Zone
DCF + CAPM	8%	19%
DCF + CAPM + EE	16%	24%
DCF + CAPM + EE + RP	18%	



Increase in ROE versus current method (DCF only)

Average of:	% increase (cumulative)	
	Midpoint	Top of Zone
DCF + CAPM	5%	7%
DCF + CAPM + EE	10%	11%
DCF + CAPM + EE + RP	11%	

It is not surprising – and perhaps even expected – that an accounting measure of projected ROE is generally higher than the market-based model results given the fact that investors are willing in almost all cases to pay a large market premium over book value to purchase or hold utility company shares. In other words, investors’ expected market returns on their investment in those shares is lower than the (Value Line) expected accounting returns. Rather than justify a basis for *including* Expected Earnings in the determination of ROE, financial theory and practical limitations support *excluding* this method from FERC’s consideration altogether. At the very most, FERC should limit its consideration of Expected Earnings in ROE cases based on circumstances where the analysis corroborates other evidence that the DCF-based ROE may be insufficiently low for the utility to meet the capital attraction standard.

D. FERC’s proposal to set ROEs based on a formulaic averaging of model outputs improperly fail to consider evidence and circumstances presented in individual cases.⁴⁹

FERC’s proposed new ROE methodology violates established precedent allowing FERC to use its judgment, rather than resorting to an overly rigid reliance on models. “Because ratemaking is not a science, FERC must use models to inform, not rigidly to determine, its judgment as to an appropriate ROE for a utility.”⁵⁰ But if it adopts the *Coakley* ROE methodology, FERC would do exactly the opposite. FERC proposes

⁴⁹ This section is responsive to the ROE NOI Question E11, which asks “To what extent, if any, should the Commission exercise judgment in using financial models to set ROEs under various capital market conditions?”, 166 FERC ¶ 61,207 at P35.

⁵⁰ *Emera Maine*, 854 F.3d at 20 (quoting *Boston Edison Co. v. FERC*, 885 F.2d 962, 969-70 (1st Cir. 1989)).

limiting the ROE determination to the numerical output of an equally-weighted average of the model results – and with little or no clear options for parties to sway FERC on a more appropriate placement of the ROE within the zone of reasonableness, since results from all of the financial models will have already been considered to set the base ROE.

FERC’s approach would improperly truncate its own ability and responsibility to give reasoned consideration to the evidence, based on the unique facts and circumstances relevant to the individual rate case, allowing FERC to instead point to a methodology.

“In reviewing a rate order courts must determine whether or not the end result of that order constitutes a reasonable balancing, based on factual findings ... Moreover, an order cannot be justified simply by a showing that each of the choices underlying it was reasonable; those choices must still add up to a reasonable result.”⁵¹ Thus it is critical for FERC to give reasoned consideration to, and evaluate the just and reasonable ROE for a utility based on the within the range of *potential* ROEs not simply relegate the rate-setting to the numeric output from the averaging methodology.

Notably, the CPUC considers results from the DCF, CAPM, and Risk Premium models to set a just and reasonable ROE, but not the Expected Earnings model. But the CPUC does not proscribe a specific formulaic approach for weighing the results of each of these models to determine the ROE. Rather, the CPUC has stated that “[i]n the final

⁵¹ See *Jersey Cent. Power & Light Co.*, 810 F.2d at 1177-78; see also *id.* at 1180 (noting it would be incorrect for court to turn its focus from the end result to the methodology, which would “evade the question whether the component decisions together produce just and reasonable consequences”); see also *Tenn. Gas Pipeline Co.*, 926 F.2d at 1209 (“The notion of lawfulness requires insistence that the chosen framework not collapse in practice into a standard less exercise of Commission discretion resting on no more than an assertion of expertise.”).

analysis, it is the application of informed judgment, not the precision of financial models, which is the key to selecting a specific ROE estimate.”⁵² FERC too is not bound to use any particular methodology or formula in ROE determinations, and it has discretion regarding the methodology by which it determines whether a rate is just and reasonable.⁵³ FERC should maintain this legal discretion in rate-setting and not presumptively adopt a rigid, formulaic methodology that will impose undue complexity on ROE cases, particularly where the methodology is not balancing the interests of investors and utility customers.

E. FERC’s proposed approach to screening out section 206 complaints is arbitrary and contrary to *Emera Maine*.

FERC’s proposed methodology to calculate a composite presumptive zone of reasonableness to screen and dismiss section 206 challenges to existing ROEs cannot be squared with the *Emera Maine* decision that prompted FERC to propose the new ROE methodology in the first place. Question G2 of the ROE NOI asks “[i]s the quartile approach that the Commission proposed in the Coakley and MISO Briefing Orders appropriate?”⁵⁴ It is not, because FERC’s proposal would arbitrarily (and unlawfully) erect a new hurdle by requiring FERC to dismiss section 206 challenges to an existing

⁵² See Cal. P.U.C. Decision 12-04-015 at 28. This is the CPUC’s last substantive decision reviewing the electric utilities’ Cost of Capital. On April 22, 2019, the California Investor Owned Utilities filed cost of capital applications which are pending before the CPUC. See docket cards for A.19-04-014, A.19-04-015, A.19-04-017, A.19-04-018. The CPUC’s comments in response to FERC’s ROE NOI do not pre-judge any outcomes in the pending CPUC proceedings.

⁵³ *Elec. Consumers Res. Council*, 747 F.2d at 1514 n.6 (“neither statutes nor decisions of this court require that the Commission utilize a particular formula or a combination of formulae to determine whether rates are just and reasonable”).

⁵⁴ ROE NOI, 166 FERC ¶ 61,207 at P37.

ROE if it appears to fall within a “composite” range of ROEs produced by averaging the DCF, CAPM, and Expected Earnings models. FERC should revise the proposed methodology in two ways.

First, FERC must not simply dismiss a section 206 complaint outright if the existing ROE falls within a “presumptive zone” of reasonableness, without evaluating any evidence specific to the case. The *Emera Maine* court recognized that FPA Section 206 does not require FERC to show that an existing rate is “entirely outside the zone of reasonableness” before it can exercise Section 206 authority to change the rate.⁵⁵ “Thus, while showing that the existing rate is entirely outside of the zone of reasonableness may illustrate the rate is unlawful, that is not the *only* way in which FERC [or a complainant] can satisfy its burden under section 206.”⁵⁶ Moreover, “[w]hether a rate, even one within the zone of reasonableness, is unlawful depends on the particular circumstances of the case.”⁵⁷ And FERC itself has “correctly noted[,] rates within the zone of reasonableness are not per se just and reasonable, depending upon ‘the circumstances of the case.’”⁵⁸ FERC would ignore – and indeed turn this clear directive on its head – by requiring dismissal unless an existing ROE *does* fall outside of a “zone of reasonableness quartile.” Rather than screening complaints this way, FERC should allow section 206 challenges to proceed to discovery, testimony and hearings, if needed, so long as the complainants

⁵⁵ *Emera Maine*, 854 F.3d at 22-23.

⁵⁶ *Id.* at 24 (internal citations omitted).

⁵⁷ *Id.* at 23.

⁵⁸ *Id.* at 26.

present a credible challenge. Otherwise, FERC will improperly fail to evaluate the particular circumstances of the case.

Second, if FERC retains a pre-screen process for section 206 complaints, at the very least it must not *increase* the “presumptive” range of just and reasonable ROEs to the upper quartile of the composite range. This would improperly duplicate (or triplicate) risk-adjustments that are already reflected in (1) the proxy group selection process, (2) utility-specific risk adders that FERC may award, and (3) FERC’s proposed change to utilize additional models in the first place, rather than continue its sole reliance on the DCF model.

Financial analyst credit ratings already account for financial and non-financial (i.e., regulatory and other business risks). A utility’s risks profile is therefore already incorporated through and reflected in the proxy group screening process, which limits the proxy group to utilities that are within one “notch” of ratings to the subject utility. FERC also regularly approves ROE incentives that recognize utility-specific risks and are designed to reduce risks associated with new utility investments.⁵⁹ Thus, increasing the presumptive just and reasonable range of ROEs to some level above the midpoint would improperly over-inflate the perceived risk of a utility. There is no basis for FERC to decide as a policy matter that an above-average risk utility’s ROE will be just and reasonable *unless* it falls below a quartile centered on the *upper*-median or midpoint of

⁵⁹ See *Promoting Transmission Inv. Through Pricing Reform*, 116 FERC ¶ 61,057, 61250 (2006); 18 C.F.R. § 35.35 (defining incentive-based rate treatment including Construction Work in Progress, prudently incurred pre-commercial operations costs, and abandoned plant costs).

the total zone or reasonableness established by the models—and especially without weighing evidence presented in testimony.

Finally, the original rationale that FERC relied upon to justify an upward adjustment from the midpoint of the DCF zone of reasonableness in *Coakley* was based on capital-market concerns, which led FERC to question results from the DCF model, not utility-specific risks. (Still, the *Emera Maine* court found this rationale insufficient to justify FERC’s decision to set the just and reasonable ROE at the midpoint of the upper-half of the zone.⁶⁰) If FERC modifies the ROE methodology to consider results from alternative models, then there is clearly no justification to further bump up the range of presumptive ROEs to anything higher than the central tendency. Because FERC is already making utility-specific risk adjustments in two ways, and market-risk adjustments though its proposal to incorporate additional financial models, there is no valid explanation to support the proposed quartile approach.

II. CONCLUSION

While FERC’s new ROE math methodology may appear straightforward in the abstract, it will have real and potentially serious economic consequences for consumers. FERC’s ROE NOI fails to justify or demonstrate that such a dramatic, one-size-fits-all change is needed either to establish the just and reasonable ROE or to ensure that the

⁶⁰ *Emera Maine*, 854 F.3d at 28 (“in reaching its decision FERC failed to explain how any evidence demonstrated that [an ROE at the upper half of the zone of reasonableness] was a just and reasonable base ROE. ... FERC failed to establish a ‘rational connection’ between the record evidence and its decision”); *id.* (“FERC never explained how [an ROE at the upper half of the zone of reasonableness] was just and reasonable when the alternative benchmarks and additional record evidence it used to justify a departure *merely pointed to a base ROE somewhere above*” the midpoint of the zone of reasonableness)(emphasis added).

capital attraction standard is met. The CPUC is particularly concerned with FERC's proposal to rely on the Expected Earnings model results to screen section 206 complaints or determine a just and reasonable ROE given the likely upward bias this model introduces into ROE results. Accordingly, FERC should not force a change to the ROE methodology for *all* TO rate cases absent a robust analysis of real-world data showing how the change will affect transmission costs *along with* a demonstration of whether utilities actually need authorized ROEs to be higher than the DCF model produces to provide fair compensation, maintain credit strength, and attract and incent needed investment capital.

FERC therefore should not pursue the proposed new composite methodology at this time. The DCF method by itself is sufficient to attract investment and has been sufficient for decades. Should FERC determine that the DCF method would benefit from some supplementation, FERC should limit this enlargement only to the CAPM and Risk Premium methods, and only through a measured and tested approach: FERC should make formal changes to the ROE methodology only after analysis of real-world applications. In all circumstances, FERC should not pursue use of the Expected Earnings method to calculate ROE.

Dated: June 26, 2019

Respectfully submitted,

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APPENDIX

Evidence On Electric Utility Capital Attraction

In recent years, and particularly since the financial crisis of 2008/2009, the cost of capital for electric utilities has been low by historical standards, and this has been reflected in state commission ROE awards in rate cases. Prior to 2010, ROE awards typically exceeded 10 percent, and in recent years have averaged about 9.5 to 10.0 percent. In addition, ROE awards to “delivery service only” electrics have been slightly lower than awards to vertically-integrated electrics.

Based on periodic surveys conducted by Regulatory Research Associates, (“RRA”), the table below shows the average electric utility ROE award in state rate cases since 2009.¹

<u>Year</u>	<u>ROE Award</u>
2010	10.37%
2011	10.29
2012	10.17
2013	10.03
2014	9.91
2015	9.85
2016	9.77
2017	9.74
2018	9.59

As this table shows, on average, ROE awards for electric utilities have gradually declined from 10.4 percent in 2010 to 9.6 percent in 2018 as state commissions have been

¹ “RRA Regulatory Focus Major Rate Case Decisions, January – December 2018,” January 31, 2019.

incorporating the declining cost of equity market conditions in their decisions or in their approval of case settlements.

One key issue is whether this reduction in state commission ROE awards during the past decade, often to below 10 percent has adversely impacted the ability of electric utilities to attract capital and the willingness of those utilities to invest in capital expansion to maintain or improve utility service.

In order to test whether regulated ROE awards in recent years adequately meet the crucial capital attraction standard, this Appendix presents three relevant financial measures of investor and utility management behavior.² These measures are:

- ... **The current market-to-book ratio (“M/B”)**. This is computed as the Value Line “current price” (as of the second quarter 2019) divided by 2019 book value per share.
- ... **The five-year total return on investment**. Value Line presents a calculation of the investor’s cumulative total return (dividends plus capital gains) for the most recent five-year time period.
- ... **Expected growth in net plant**. This measures Value Line’s projected growth in each company’s net plant from the 2018 level to 2023 (the midpoint of 2022 and 2024). This growth percentage is an indication of utility management’s willingness to engage in capital investment expansion given the prevailing ROE awards.

In order to conduct the analysis, an electric utility proxy group based on FERC selection criteria was obtained from a recent filing by Southern California Edison Company (“SCE”).³ For each proxy company, the three measures of investment behavior were calculated using the actual data and projections published by the *Value Line*

² The ROEs presented above are those awarded by state commissions. This accounts for the allowed returns on the vast majority of electric utility assets.

³ Southern California Edison Company, FERC Docket No. ER19-1816-000, Exhibit SCE-25, page 22, Prepared Direct Testimony of Dr. Bente Villadsen. Please note that it was necessary to omit one proxy company, Unitil, due to a lack of projections data.

Investment Survey (“Value Line”) as of the second quarter 2019. Table 1 below presents the results.

The first measure of investor behavior is the current market/book ratio. Almost all of the proxy electric utility companies exhibit a very strong M/B ratio, with the average for the group of 32 companies being 2.05x. This indicates that declining, sub-10 percent ROE awards have not discouraged investors from purchasing utility stocks and bidding up share prices. To the contrary, the high M/B ratio indicate that investors in recent years have been finding such stocks attractive. While regulatory ROE awards have been declining, investors nevertheless find them to be compensatory (or more than compensatory) due to the market cost of equity declining by even more than the declines in ROE awards. The bidding up of share prices may also be due to investor perceptions of reduced utility investment risk.

The second measure is the five-year total return on investment, which averages 83.1 percent. This is equivalent to an annualized average return for this five-year time period of nearly 12.9 percent and is consistent with the current high market-to-book ratios. This measure also demonstrates that investors over the past several years find electric utility stocks to be very attractive investments, and by implication, state commission ROE awards to be attractive.

The third measure, projected growth in net plant, averages 24.7 percent, and is a measure of utility management’s willingness to invest in new plant and equipment. As this measure uses net plant rather than gross plant, it shows how much capital spending is expected take place over and above five years of depreciation expense. These figures indicate expectations of aggressive capital spending by utility management.

The utility net plant growth is consistent with other evidence indicating record levels of investment in the utility industry. In a 2018 report (as reported by SNL), the Edison Electric Institute states that “Industry Cap Ex in 2017 totaled \$113.6 billion,

marking the sixth consecutive year in which we've set a record high...the industry plans to maintain an elevated level of capital spending for at least the near term.”⁴

⁴ SNL, “EEI boosts Cap Ex estimates in 2018, 2019,” July 17, 2018.

TABLE 1
ELECTRIC UTILITY INDUSTRY PROXY GROUP
Measures of Capital Attraction

	<u>Company</u>	<u>Market/Book</u>	<u>Five-Year Market Return</u>	<u>Projected Net Plant Growth</u>
1.	ALLETE	1.92x	95.4%	16.7%
2.	Alliant Energy	2.20	91.9	36.0
3.	Am. Elec. Power	2.17	93.3	34.9
4.	Ameren Corp	2.26	121.6	30.3
5.	AVANGRID Inc.	1.01	N/A	31.5
6.	CMS Energy	3.16	120.1	31.5
7.	Con. Edison	1.61	79.6	26.4
8.	DTE Energy	2.09	94.7	30.4
9.	Duke Energy	1.45	51.8	24.7
10.	Edison Int.	1.92	27.5	33.4
11.	El Paso Elec.	1.89	89.0	20.7
12.	Entergy Corp.	1.90	60.9	21.9
13.	Evergy Inc.	1.54	N/A	4.2
14.	Eversource	1.90	78.6	27.0
15.	Exelon Corp.	1.47	74.2	4.5
16.	FirstEnergy Corp	2.82	54.2	23.4
17.	Hawaiian Elec.	2.00	95.6	19.1
18.	IDACORP	2.00	106.4	16.5
19.	MGE Energy	2.81	98.1	49.0
20.	NextEra Energy	2.75	124.5	44.7
21.	Northwestern	1.74	77.2	12.8
22.	OGE Energy	2.08	35.3	10.5
23.	Otter Tail	2.67	108.0	41.1
24.	Pinnacle West	1.95	108.8	20.7
25.	PNM Resources	2.05	100.6	30.0
26.	Portland Gen.	1.75	87.4	0.5
27.	PPL Corp.	1.78	18.4	21.2
28.	Public Serv. Ent.	1.95	75.3	19.8
29.	Sempra Energy	2.12	50.3	25.3
30.	Southern Co.	2.03	47.4	16.2
31.	WEC Energy	2.54	108.5	40.7
32.	Xcel Energy	<u>2.21</u>	<u>119.3</u>	<u>26.1</u>
	Average	2.05x	83.1%	24.7%

Source: "Value Line Investment Survey", April 26, May 17, and June 14, 2019.

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the foregoing “ **NOTICE OF INTERVENTION AND COMMENTS OF THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA.**” to be served by e-mail upon each party identified in the official service list compiled by the Secretary in **PL19-4-000.**

Dated at San Francisco, California, this 26th day of June, 2019.

/s/ CANDACE MOREY

Candace Morey