

166 FERC ¶ 61,207
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

[Docket No. PL19-4-000]

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

March 21, 2019

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of Inquiry.

SUMMARY: Following the decision of the U.S. Court of Appeals for the District of Columbia Circuit in *Emera Maine v. Federal Energy Regulatory Commission*, 854 F.3d 9, 23 (D.C. Cir. 2017), the Commission seeks information and stakeholder views to help the Commission explore whether, and if so how, it should modify its policies concerning the determination of the return on equity (ROE) to be used in designing jurisdictional rates charged by public utilities. The Commission also seeks comment on whether any changes to its policies concerning public utility ROEs should be applied to interstate natural gas and oil pipelines. __

DATES: Initial Comments are due **[INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and Reply Comments are due **[INSERT DATE 120 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Comments, identified by docket number, may be filed in the following ways:

- Electronic Filing through <http://www.ferc.gov>. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format.
- Mail/Hand Delivery: Those unable to file electronically may mail or hand-deliver comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE, Washington, DC 20426.
- *Instructions*: For detailed instructions on submitting comments, see the Comment Procedures Section of this document.

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SUPPLEMENTARY INFORMATION:

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Inquiry Regarding the Commission's Policy for
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NOTICE OF INQUIRY

March 21, 2019

1. In this Notice of Inquiry (NOI), the Commission seeks information and stakeholder views regarding whether, and if so how, it should modify its policies concerning the determination of the return on equity (ROE) to be used in designing jurisdictional rates charged by public utilities. The Commission also seeks comment on whether any changes to its policies concerning public utility ROEs should be applied to interstate natural gas and oil pipelines.
2. This NOI follows the decision of the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) in *Emera Maine v. FERC*,¹ reversing and vacating Opinion No. 531.² In that decision, the court held, among other things, that the Commission had failed to justify its decision under section 206 of the Federal Power Act

¹ 854 F.3d 9 (D.C. Cir. 2017) (*Emera Maine*).

² *Coakley, Mass. Attorney Gen. v. Bangor Hydro-Elec. Co.*, Opinion No. 531, 147 FERC ¶ 61,234, *order on paper hearing*, 149 FERC ¶ 61,032 (2014), *order on reh'g*, 150 FERC ¶ 61,165 (2015).

(FPA)³ to set the ROE of the New England Transmission Owners⁴ at the midpoint of the upper half of the zone of reasonableness produced by the two-step Discounted Cash Flow (DCF) analysis. While the court did not expressly question the Commission's finding that anomalous capital market conditions justified an ROE above the midpoint of the DCF zone of reasonableness, the court concluded that the Commission failed to point to record evidence supporting the conclusion that its solution to the anomalous capital market conditions—setting the base ROE at the upper midpoint rather than the midpoint—was just and reasonable.⁵

3. The Commission recognizes the potentially significant and widespread effect of our ROE policies upon public utilities. The importance of ROE policy for public utilities extends beyond the particular interests of the parties to the *Emera Maine* proceeding. Accordingly, this NOI seeks further information as the Commission re-evaluates our ROE policies following the *Emera Maine* decision. Initial Comments are due **[INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and Reply Comments are due **[INSERT DATE 120 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

³ 16 U.S.C. § 824e.

⁴ The New England Transmission Owners include Bangor Hydro-Elec. Co.; Cent. Me. Power Co.; New England Power Co. d/b/a Nat'l Grid; N.H. Transmission LLC d/b/a NextEra; NSTAR Elect. & Gas Corp.; Ne. Utilities Serv. Co.; United Illuminating Co.; Unitil Energy Systems, Inc. and Fitchburg Gas & Elec. Light Co.; and Vt. Transco, LLC. Opinion No. 531, 147 FERC ¶ 61,234 at P 1 n.3.

⁵ *Emera Maine*, 854 F.3d at 28-29.

I. BACKGROUND

A. The DCF Model

4. The Supreme Court has held that “the return to the equity owner should be commensurate with the return on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.”⁶ Since the 1980s, the Commission has used the DCF model to develop a range of returns earned on investments in companies with corresponding risks for purposes of determining the ROE for regulated entities.

5. The DCF model was originally developed in the 1950s as a method for investors to estimate the value of securities, including common stocks. It is based on the premise that “a stock’s price is equal to the present value of the infinite stream of expected dividends discounted at a market rate commensurate with the stock’s risk.”⁷ With simplifying assumptions, the DCF model results in the investor using the following formula to determine share price:

$$P = D/(k-g),$$

⁶ *Fed. Power Comm’n v. Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944) (*Hope*); see also *Bluefield Waterworks & Improvement Co. v. Pub. Serv. Comm’n*, 262 U.S. 679, 692-693 (1923) (*Bluefield*); *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 314 (1989).

⁷ *Canadian Ass’n of Petroleum Producers v. FERC*, 254 F.3d 289, 293 (D.C. Cir. 2001); see also *Composition of Proxy Groups for Determining Gas and Oil Pipeline Return on Equity*, 123 FERC ¶ 61,048, at P 58 (2008) (*Proxy Group Policy Statement*).

where P is the price of the stock at the relevant time, D is the current dividend, k is the discount rate (or investors' required return), and g is the expected growth rate in dividends.

6. For ratemaking purposes, the Commission rearranges the DCF formula to solve for k, the discount rate, so that:

$$k = D/P + g.$$

Under the resulting DCF formula, the investor's required return is estimated to equal current dividend yield (dividends divided by share price) plus the projected future growth rate of dividends. The term "k" represents the investor's required return for investing in the firm (i.e., the cost of equity).⁸ The Commission's practice has been to set a regulated firm's rate of return, or "r" to equal "k" the investor's required return for investing in the firm.

7. During the decades that the Commission has used the DCF model, the Commission periodically has made changes in its implementation of the model with respect to the industries that it regulates. In Opinion No. 531, the Commission used the same two-step, constant-growth DCF model in public utility cases as it had used in natural gas and oil pipeline cases for the last 20 years.⁹ For the dividend yield component of that model, the Commission derives a single, average dividend yield based on the indicated dividend and the average of the monthly high and low stock prices over a

⁸ See Opinion No. 531, 147 FERC ¶ 61,234 at P 15.

⁹ *Id.* P 8.

six-month period.¹⁰ The Commission then uses a two-step method to estimate a single constant growth rate in dividends.¹¹

8. In order to project short-term growth in dividends, the Commission uses security analysts' three-year to five-year earnings forecasts, as published by the Institutional Brokers Estimate System (IBES). The Commission has held that earnings forecasts made by investment analysts are the best available estimates of short-term dividend growth based on a finding that they are relied on by investors when making their investment decisions.¹²

9. The use of a long-term growth estimate for dividends originated in the Commission's 1994 decision in *Ozark Gas Transmission System*.¹³ In that decision, the Commission explained:

In the constant growth DCF model used by both parties in this proceeding, dividends are expected to grow indefinitely at the rate of (g). The indefinite future used by the DCF model is 50 years or more While we concede that it is more difficult to project growth for many years from the present time, we conclude that a projection limited to five years, with no evidence of what is anticipated beyond that point, is not consistent with the DCF model and cannot be relied on in a

¹⁰ See, e.g., *Portland Natural Gas Transmission Sys.*, Opinion No. 510, 134 FERC ¶ 61,129, at PP 232-34 (2011).

¹¹ Opinion No. 531, 147 FERC ¶ 61,234 at P 17.

¹² See, e.g., *Transcon. Gas Pipe Line Corp.*, Opinion No. 414-B, 85 FERC ¶ 61,323, at 62,269 & n.34 (1998) (citing an article entitled "Using Analysts' Growth Forecasts to Estimate Shareholders Required Rates of Return" in *Financial Management*, Spring 1986, pages 58-67); *Proxy Group Policy Statement*, 123 FERC ¶ 61,048 at PP 73-77.

¹³ 68 FERC ¶ 61,032 (1994) (*Ozark*).

DCF analysis.¹⁴

In Opinion No. 396-B, issued in 1997, the Commission held that the long-term growth in the United States economy as a whole, as measured by gross domestic product (GDP), is the most reasonable projection of long-term growth rates for interstate natural gas pipelines.¹⁵ The Commission stated, “[i]t is reasonable to expect that, over the long-run, a regulated firm will grow at the rate of the average firm in the economy, because regulation will generally prevent the firm from being extremely profitable during good periods, but also protects it somewhat during bad periods.”¹⁶ The D.C. Circuit affirmed the Commission’s decision to use GDP to estimate long-term growth in dividends.¹⁷

10. When the Commission first required use of a long-term growth estimate, the Commission averaged the short-term IBES growth estimate with the long-term GDP

¹⁴ *Id.* at 61,105. The Commission chose 50 years to represent the indefinite future because the present value of a one-dollar dividend received 50 years in the future and discounted at 12 percent is less than one cent. *Id.* at n.32.

¹⁵ Opinion No. 396-B, 79 FERC at 62,382-83, *reh’g denied*, Opinion No. 396-C, 81 FERC ¶ 61,036 (1997).

¹⁶ *Id.*

¹⁷ *Williston Basin Interstate Pipeline Co., v. FERC*, 165 F.3d 54, 64 (D.C. Cir. 1999), finding that “[t]he testimony adduced at the hearing demonstrated that major investment houses used an economy-wide approach to project long-term growth, that such an approach was supported by practical economic considerations, and that existing industry-specific approaches imperfectly reflected investor expectations and made unfounded economic assumptions.” Nonetheless, finding the record evidence inadequate to support the Commission’s use of certain GDP data, the court remanded the case for further proceedings on this issue. Subsequently, the Commission has used an average of three GDP growth projections.

growth estimate in determining the overall constant dividend growth rate.¹⁸ However, in 1998, in Opinion No. 414-A, the Commission changed the weighting scheme in order to give two-thirds weight to short-term forecasts and one-third weight to long-term forecasts. The Commission explained,

While determining the cost of equity nevertheless requires that a long-term evaluation be taken into account, long-term projections are inherently more difficult to make, and thus less reliable, than short-term projections. Over a longer period, there is a greater likelihood for unanticipated developments to occur affecting the projection. Given the greater reliability of the short-term projection, we believe it is appropriate to give it greater weight. However, continuing to give some effect to the

¹⁸ Opinion No. 396-B, 79 FERC at 62,383, *reh'g denied*, Opinion No. 396-C, 81 FERC ¶ 61,036.

long-term growth projection, will aid in normalizing any distortions that might be reflected in short-term data limited to a narrow segment of the economy.¹⁹

The D.C. Circuit affirmed this two-thirds/one-third weighting for determining the overall dividend growth estimate.²⁰

11. Prior to Opinion No. 531, the Commission determined public utility ROEs using a one-step, constant-growth DCF model, which considered only short-term growth projections for a public utility.²¹ In 2000, the Commission decided not to adopt the two-step DCF methodology for public utilities, primarily because they were only just beginning the process of restructuring. Under those circumstances, the Commission determined that investors would be unlikely to place much weight on long-term forecasts because the uncertainties regarding the future were so great.²² However, in Opinion No. 531, the Commission found that investor uncertainty due to the type of changes anticipated in 2000 had diminished. Accordingly, the Commission concluded that the time had come to apply the same DCF methodology in public utility cases as it utilizes in

¹⁹ Opinion No. 414-A, 84 FERC at 61,423-24.

²⁰ *Canadian Ass'n of Petroleum Producers v. FERC*, 254 F.3d at 297. Since Opinion No. 414-A, the Commission has made no changes in its two-step DCF methodology used for natural gas and oil pipelines, except to require that, if a master limited partnership (MLP) is included in the proxy group, its long-term growth rate should be one-half the GDP growth estimate. *Proxy Group Policy Statement*, 123 FERC ¶ 61,048 at P 106. The Commission explained that MLPs have less growth potential than corporations, because they generally distribute to partners an amount in excess of their reported earnings. *Id.* P 12.

²¹ See Opinion No. 531, 147 FERC ¶ 61,234 at PP 24-31 (describing the one-step method).

²² Opinion No. 445, 92 FERC at 61,261-62.

natural gas and oil pipeline cases.²³ Most importantly, the Commission found that including a long-term estimate of dividend growth in the constant growth DCF model would bring the public utility ROE approach into full alignment with the underlying theory of the DCF model.²⁴ As it found with respect to natural gas and oil pipelines, the Commission found that it is reasonable to project that public utilities, which transmit electricity to supply energy to the national economy, will have long-term growth consistent with the growth of the economy as a whole.²⁵ The Commission also found that the use of a long-term growth projection will aid in normalizing any distortions that might be reflected in short-term data limited to a narrow segment of the economy. Finally, using the same long-term growth projection for all public utilities produces a narrower zone of reasonableness, consistent with the fact different firms in a regulated industry would not ordinarily be expected to have widely varying levels of profitability.

²³ Opinion No. 531, 147 FERC ¶ 61,234 at PP 35-36.

²⁴ Incorporating a long-term growth estimate in the DCF methodology is consistent with the underlying theory of the constant growth DCF model because

from the standpoint of the DCF model that extends into perpetuity, analysts' horizons are too short, typically five years. It is often unrealistic for such growth to continue in perpetuity. A transition must occur between the first stage of growth forecast by analysts for the first five years and the company's long-term sustainable growth rate. . . . It is useful to remember that eventually all company growth rates, especially utility services growth rates, converge to a level consistent with the growth rate of the aggregate economy.

Roger A. Morin, *New Regulatory Finance* 308 (Public Utilities Reports, Inc. 2006) (Morin).

²⁵ See Opinion No. 531, 147 FERC ¶ 61,234 at P 40.

12. No party in the Opinion No. 531 proceeding objected to the Commission's adoption of the two-step DCF model for public utilities, and the Commission also applied that model, without objection, in Opinion No. 551, addressing a complaint that the MISO Transmission Owners' ROE is unjust and unreasonable.²⁶

B. Other Financial Models

13. Although the Commission has used the DCF model to determine ROEs for public utilities and natural gas and oil pipelines since the 1980s, investors use other financial models in addition to the DCF model to evaluate investments. In a number of recent proceedings, discussed further below, the Commission has considered certain other financial models when determining the just and reasonable ROE for public utilities. These other financial models include the Capital Asset Pricing Model (CAPM), Expected Earnings Model, and Risk Premium method, which are described below.

1. The CAPM Model

14. Investors use CAPM analysis as a measure of the cost of equity relative to risk.²⁷ The CAPM methodology is based on the theory that the market-required rate of return for a security is equal to the risk-free rate plus a risk premium associated with the specific security. Specifically, the CAPM methodology estimates the cost of equity by taking the "risk-free rate" and adding to it the "market-risk premium" multiplied by "beta."²⁸ The

²⁶ *Ass'n of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, 156 FERC ¶ 61,234 (2016).

²⁷ Morin at 146-147.

²⁸ *Id.* at 150.

risk-free rate is represented by a proxy, typically the yield on 30-year U.S. Treasury bonds.²⁹ Betas, which are published by several commercial sources, measure a specific stock's risk relative to the market. The market risk premium is calculated by subtracting the risk-free rate from the expected return. The expected return can be estimated either using a backward-looking approach, a forward-looking approach, or a survey of academics and investment professionals.³⁰ A CAPM analysis is backward-looking if the expected return is determined based on historical, realized returns.³¹ A CAPM analysis is forward-looking if the expected return is based on a DCF analysis of a large segment of the market.³² Thus, in a forward-looking CAPM analysis, the market Risk Premium is calculated by subtracting the risk-free rate from the result produced by the DCF analysis.³³

2. **Expected Earnings**

15. A comparable earnings analysis is a method of calculating the earnings an investor expects to receive on the book value of a particular stock. The analysis can be either backward looking using the company's historical earnings on book value, as reflected on the company's accounting statements, or forward-looking using estimates of

²⁹ *Id.* at 151.

³⁰ *Id.* at 155-162.

³¹ *Id.* at 155-156.

³² *Id.* at 159-160.

³³ *Id.* at 150, 155.

earnings on book value, as reflected in analysts' earnings forecasts for the company.³⁴

The forward-looking approach is often referred to as an "Expected Earnings" analysis.

The returns on book equity that investors expect to receive from a group of companies with risks comparable to those of a particular utility are relevant to determining that utility's cost of equity, because those returns on book equity help investors determine the opportunity cost of investing in that particular utility instead of other companies of comparable risk.³⁵

3. **Risk Premium**

16. The Risk Premium methodology, in which interest rates are a direct input, is "based on the simple idea that since investors in stocks take greater risk than investors in bonds, the former expect to earn a return on a stock investment that reflects a 'premium' over and above the return they expect to earn on a bond investment."³⁶ As the Commission found in Opinion No. 531, investors' required risk premiums expand with low interest rates and shrink at higher interest rates. The link between interest rates and risk premiums provides a helpful indicator of how the interest rate environment affects investors' required rates of return.

17. Multiple approaches have been advanced to determine the equity risk premium for a utility.³⁷ For example, a risk premium can be developed directly by conducting a

³⁴ See Opinion No. 531-B, 150 FERC ¶ 61,165 at P 125.

³⁵ *Id.* P 128.

³⁶ Opinion No. 531, 147 FERC ¶ 61,234 at P 147 (citing Morin at 108).

³⁷ See generally Morin at 107-130.

Risk Premium analysis for the company at issue, or indirectly by conducting a Risk Premium analysis for the market as a whole and then adjusting that result to reflect the risk of the company at issue.³⁸ Another approach for the utility context is to “examin[e] the risk premiums implied in the returns on equity allowed by regulatory commissions for utilities over some past period relative to the contemporaneous level of the long-term U.S. Treasury bond yield.”³⁹

C. Opinion Nos. 531 and 551 and Anomalous Market Conditions

18. Since the financial crisis of 2008-2009, the Commission has grappled with whether the DCF model continues to produce ROEs for public utilities consistent with the *Hope* and *Bluefield* capital attraction standards.⁴⁰ In both Opinion Nos. 531 and 551, the Commission concluded that the capital market conditions prevailing after the financial crisis—in particular, the low yields on bonds, including U.S. Treasury bonds—rendered the Commission less confident that a mechanical application of the midpoint of the DCF-produced zone of reasonableness would provide a risk-appropriate ROE, as required by *Hope* and *Bluefield*. The Commission therefore considered a series of alternative valuation methodologies (i.e., CAPM analysis, Expected Earnings analysis, and Risk Premium analysis), as well as the ROEs allowed by state public utility commissions, “to gain insight into the potential impacts of these unusual capital market conditions on the appropriateness of using [the midpoint of the DCF zone of

³⁸ *Id.* at 110.

³⁹ *Id.* at 123.

⁴⁰ *Hope*, 320 U.S. 591; *Bluefield*, 262 U.S. 679.

reasonableness].”⁴¹ The Commission concluded that the comparisons to the other valuation methodologies supported setting the New England Transmission Owners’ ROE above the midpoint of the DCF zone of reasonableness. After determining that the just and reasonable base ROE should be above the midpoint, the Commission stated that it has traditionally used measures of central tendency to determine an appropriate return in ROE cases. Moreover, in cases involving placement of the base ROE above the central tendency of the zone of reasonableness, the Commission has used the central tendency of the top half of the zone.⁴² Accordingly, in both Opinion Nos. 531 and 551, the Commission set the ROE at the midpoint of the upper half of the zone of reasonableness (upper midpoint).⁴³ In Opinion No. 531, the upper midpoint of the 7.03 percent to 11.74 percent zone of reasonableness was 10.57 percent.⁴⁴ In Opinion No. 551, the upper midpoint of the 7.23 percent to 11.35 percent zone of reasonableness was 10.32 percent.⁴⁵

D. The Emera Maine Decision

19. Various parties sought review of Opinion No. 531 in the D.C. Circuit. The New England Transmission Owners argued that the Commission failed to demonstrate that

⁴¹ Opinion No. 531, 147 FERC ¶ 61,234 at P 145.

⁴² *Id.* PP 151-152; Opinion No. 551, 156 FERC ¶ 61,234 at PP 275-276.

⁴³ The Commission sets the ROE for a group of utilities at the midpoint or upper midpoint of the zone of reasonableness, but the ROE for a single entity at the median or upper median. *See S. California Edison Co. v. FERC*, 717 F.3d 177, 181-182 (D.C. Cir. 2013).

⁴⁴ Opinion No. 531, 147 FERC ¶ 61,234 at P 142.

⁴⁵ Opinion No. 551, 156 FERC ¶ 61,234 at P 67.

their existing 11.14 base ROE was unjust and unreasonable. The customer representatives argued that the Commission had failed to show that the new 10.57 base ROE was just and reasonable. In *Emera Maine*, the D.C. Circuit agreed with both the New England Transmission Owners and customer representatives and vacated and remanded Opinion No. 531 *et seq.*

20. As an initial matter, the court rejected the New England Transmission Owners' argument that an ROE within the DCF-produced zone of reasonableness could not be deemed unjust and unreasonable. The court explained that the zone of reasonableness established by the DCF is not "coextensive" with the "statutory" zone of reasonableness envisioned by the FPA.⁴⁶ Accordingly, the court concluded that the fact that the New England Transmission Owners' existing ROE fell within the zone of reasonableness produced by the DCF did not necessarily indicate that it was just and reasonable for the purposes of the FPA.⁴⁷

21. Nevertheless, the court agreed with the New England Transmission Owners that the Commission had not adequately shown that their existing ROE was unjust and unreasonable. The court explained that the FPA's statutory "zone of reasonableness creates a broad range of potentially lawful ROEs rather than a single just and reasonable ROE" and that whether a particular ROE is unjust and unreasonable depends on the "particular circumstances of the case."⁴⁸ Thus, the fact that the New England

⁴⁶ *Emera Maine*, 854 F.3d at 22-23.

⁴⁷ *Id.* at 23.

⁴⁸ *Id.* at 23, 26.

Transmission Owners' existing ROE did not equal the just and reasonable ROE that the Commission would have set using the current DCF analysis inputs did not necessarily indicate that the New England Transmission Owners' existing ROE fell outside the statutory zone of reasonableness.⁴⁹ As such, the D.C. Circuit concluded that Opinion No. 531 "failed to include an actual finding as to the lawfulness of [the New England] Transmission Owners' existing base ROE" and that its conclusion that their existing ROE was unjust and unreasonable was itself arbitrary and capricious.⁵⁰

22. The court also agreed with the customer representatives that the Commission failed to adequately demonstrate that the new base ROE it established was just and reasonable. The Court did not express concerns regarding the Commission's decision to "abandon its traditional use of the midpoint of the zone of reasonableness in setting [the New England] Transmission Owners' base ROE" based on the anomalous capital market conditions and its resulting evaluation of alternative methodologies for calculating the cost of equity.⁵¹ The court stated that "the alternative benchmarks and additional record evidence may have shown that some upward adjustment was warranted."⁵²

⁴⁹ *Id.* at 27 ("To satisfy its dual burden under section 206, FERC was required to do more than show that its single ROE analysis generated a new just and reasonable ROE and conclusively declare that, consequently, the existing ROE was per se unjust and unreasonable.").

⁵⁰ *Id.*

⁵¹ *Id.* at 27; *see also id.* at 30 ("[W]hile the evidence in this case may have supported an upward adjustment from the midpoint of the zone of reasonableness, FERC failed to provide any reasoned basis for selecting 10.57 percent as the new base ROE.").

⁵² *Id.* at 30 (quotation marks omitted).

23. Nevertheless, the court concluded that the Commission failed to point to evidence in the record supporting the conclusion that its solution to the anomalous capital market conditions—i.e., setting the base ROE at the upper midpoint rather than at the midpoint—was just and reasonable. The court explained that the Commission expressly did not rely on the alternative methodologies to support its determination that a 10.57 percent base ROE was just and reasonable. The court also observed that the Commission’s explanation that it had previously set the just and reasonable base ROE at a measure of central tendency for the upper part of the DCF-produced zone of reasonableness was inapt because, in those cases, the Commission had first determined that those utilities were not of average risk, whereas the Commission found that the New England Transmission Owners were of average risk. The court therefore remanded the proceeding so that the Commission could further explain why the base ROE it selected is just and reasonable.

E. Post-Emera Maine Proceedings

24. Following the decision in *Emera Maine*, the Commission issued two orders proposing a methodology for addressing the issues that were remanded to the Commission in *Emera Maine* and establishing a paper hearing on whether and how this methodology should apply to the four complaint proceedings concerning both the New England and MISO transmission owners’ ROE.⁵³ In those orders, the Commission proposed to change its approach to determining base ROE by giving equal weight to

⁵³ See *Martha Coakley v. Bangor Hydro-Elec. Co.*, 165 FERC ¶ 61,030 (2018) (*Coakley* Briefing Order); *Ass’n of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, 165 FERC ¶ 61,118 (2018) (*MISO* Briefing Order).

four financial models instead of primarily relying on the DCF methodology. The Commission stated that evidence indicates that investors do not rely on any one model to the exclusion of others. Therefore, relying on multiple financial models makes it more likely that the Commission's decision will accurately reflect how investors make their investment decisions.⁵⁴

25. Specifically, the Commission proposed to rely on three financial models that produce zones of reasonableness—the DCF model, CAPM model, and Expected Earnings model—to establish a composite zone of reasonableness. The zone of reasonableness produced by each model would be given equal weight and averaged to determine the composite zone of reasonableness. The Commission explained that the Risk Premium model produces a single numerical point rather than a range; therefore, it cannot be used with the other three financial models in establishing a composite zone of reasonableness.⁵⁵ The Commission proposed a framework for using that composite zone of reasonableness in evaluating whether an existing base ROE remains just and reasonable.⁵⁶

26. For purposes of establishing a new just and reasonable base ROE when the existing base ROE has been shown to be unjust and unreasonable, the Commission

⁵⁴ *Coakley* Briefing Order, 165 FERC ¶ 61,030 at P 34; MISO Briefing Order, 165 FERC ¶ 61,118 at P 36.

⁵⁵ *Coakley* Briefing Order, 165 FERC ¶ 61,030 at P 36; MISO Briefing Order, 165 FERC ¶ 61,118 at P 38.

⁵⁶ *Coakley* Briefing Order, 165 FERC ¶ 61,030 at P 36; MISO Briefing Order, 165 FERC ¶ 61,118 at P 38.

proposed relying on four financial models—the DCF model, CAPM model, Expected Earnings model, and Risk Premium model—to produce four separate base ROE estimates that would then be averaged to produce a specific just and reasonable base ROE.

27. The Commission established a paper hearing in the *Coakley* and MISO complaint proceedings⁵⁷ and directed the participants in those proceedings to submit briefs regarding this proposed new approach and how to apply it to those proceedings.⁵⁸

II. Request for Comments

28. As part of ensuring that the Commission continues to meet our statutory obligations, the Commission, on occasion, engages in public inquiry to gauge whether there is a need to add to, modify, or eliminate certain policies or regulatory requirements. In this proceeding, the Commission seeks comments on potential modifications to our approach to determining a just and reasonable ROE. Although the Commission requested briefing on some of the issues below in the *Coakley* and MISO Briefing Orders, this proceeding will provide all interested stakeholders with the opportunity to comment on the Commission's ROE policy in light of the decision in *Emera Maine*.

29. The Commission seeks comments on eight general topics as part of this inquiry: (A) the role of the Commission's base ROE in investment decision-making and what objectives should guide the Commission's approach; (B) whether uniform application of

⁵⁷ *Coakley* Briefing Order, 165 FERC ¶ 61,030 at P 31; MISO Briefing Order, 165 FERC ¶ 61,118 at P 20.

⁵⁸ *Coakley* Briefing Order, 165 FERC ¶ 61,030 at P 31; MISO Briefing Order, 165 FERC ¶ 61,118 at P 20; *see also Arkansas Pub. Serv. Comm'n*, 165 FERC ¶ 61,119 (2018).

our base ROE policy across the electric, interstate natural gas pipeline and oil pipeline industries is appropriate and advisable; (C) performance of the DCF model, (D) proxy groups; (E) financial model choice; (F) mismatch between market-based ROE determinations and book-value rate base; (G) how the Commission determines whether an existing ROE is unjust and unreasonable under the first prong of the FPA section 206; and (H) model mechanics and implementation.

30. In the following sections, we outline these eight topics and enumerate questions that commenters may consider in addressing each topic. Commenters need not address every topic or answer every question enumerated below.

A. Role and Objectives of the Commission's Base ROE Policy

31. The Commission seeks comment on the role of base ROE in investment decision-making and what objectives should guide the Commission's approach to our base ROE policy apart from the basic *Hope/Bluefield* standard.

A1. To 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?

A2. How would using the ROE methodology described in the *Coakley* and MISO Briefing Orders affect an investor's ability to forecast the ROE the Commission would establish in a litigated proceeding and the ability of participants to propose, contest, and settle base ROEs as compared to using only the DCF methodology?

A3. Currently, public utilities in different Independent System Operators (ISOs) or RTOs may receive different ROEs, despite all using national proxy groups, due primarily to differences in when FPA section 205 or 206 proceedings were initiated. Are such variations justified, and, if not, should the Commission consider applying the same ROE to all utilities in RTOs/ISOs based on the most recent proceeding?

A4. Should the ROE reflect the cost of capital at the time of the investment or be subject to adjustment to reflect the contemporary ROE required by investors?

A4.a. Should the Commission consider a “vintage approach,” with ROE fixed for the life of the asset at the time that each asset was completed?

A4.b. Would such a “vintage approach” need to be coupled with an annual national default ROE for investments made in that year, so as to minimize the need for numerous annual litigated ROE proceedings for each public utility that made an investment during that year? What procedure should be used to determine such a default ROE?

B. ROEs for different Commission-regulated industries

32. The Commission seeks comment on whether to apply a single ROE policy across electric, interstate natural gas and oil pipeline industries.

B1. In Opinion No. 531, the Commission found that the same DCF methodology should be used to determine an ROE for all its regulated industries, including public utilities, as well as gas and oil pipelines. If the Commission departs from our sole use of a two-step DCF methodology for public utilities, should the new method or methods also be used to determine natural gas and oil pipeline ROEs?

B2. The Risk Premium methodology approved in Opinion Nos. 531 and 551 relied to a large extent on ROEs set forth in numerous settlements involving public utility formula rates approved by the Commission over the preceding 15 or 20 years. Natural gas and oil pipelines have stated rates and settlements of their rate cases are typically “black box” settlements that do not specify an agreed-upon ROE. How could the Risk Premium methodology be implemented in natural gas or oil pipeline rate cases where there is no history of ROE settlements from which to develop a risk premium study of the type used in Opinion Nos. 531 and 551?

B3. Given the tendency of the Expected Earnings methodology to produce more high-end outliers than the other methodologies, would there be a sufficient number of natural gas and oil pipeline proxy members to implement the Expected Earnings methodology for gas and oil pipelines?

B4. What, if any, differences between public utilities on the one hand and natural gas and oil pipelines on the other would justify using different methodologies to determine their ROEs?⁵⁹

⁵⁹ See *Trailblazer Pipeline Co. LLC*, 166 FERC ¶ 61,141, at P 48 (2019) (setting

C. Performance of the DCF Model

33. The Commission seeks comment on the robustness of the DCF model over time and under differing investment conditions.

C1. The DCF model assumes stock prices are equal to the present value of projected future cash flows. Is there evidence of situations when these assumptions are inaccurate?

C2. Have current and projected proxy company earnings over the last 10 to 20 years increased in a manner that would justify any increases in their stock prices over the same period, consistent with DCF model assumptions?

C3. How does the DCF methodology perform over a wide range of interest rate conditions?

C3.a. What specific assumptions of the DCF model, if any, do not work well in low or high interest rate environments?

C3.b. Is there evidence that the volatility of price-to-earnings ratios over the last 10 to 20 years, assumed to be constant in the DCF methodology, has been driven by the wide swings in interest rates over this period? If so, would the constant P/E assumption impact the award of reasonable ROEs?

D. Proxy Groups

34. The Commission seeks comment on the appropriate guidelines for proxy group composition, elimination of outliers, and placement of base ROE within a zone of reasonableness.

D1. Should proxy groups for electric utilities, as well as natural gas and oil pipelines, consist only of companies with corresponding regulated businesses?

D1.a. For companies with a combination of regulated and unregulated businesses, should a company be required to derive a certain percentage of its revenues from the applicable regulated business in order for that

for hearing the issue of whether it would be appropriate to apply alternatives to the DCF for natural gas pipelines and whether appropriate data that would support those alternatives are available).

company to be included in the proxy group that is used to determine an ROE for a company in that regulated business?

D1.b. Are the corresponding proxy groups sufficiently large given the continued consolidation in the industries?

D2. Should risk be considered both in the proxy group selection and in the placement within the zone of reasonableness?

D2.a. Should the Commission's approach to proxy group selection change depending on which financial models it considers when determining the just and reasonable ROE and, if so, how?

D3. Should the Commission consider non-energy companies when selecting proxy groups?

D3.a. What non-energy industries or securities have comparable risk to public utilities and natural gas and oil pipelines, if any?

D3.b. Do certain non-energy industries or securities feature fewer outliers?

D4. What, if any, are appropriate high- and low-end outlier tests?

D4.a. The Commission currently excludes from the proxy group companies whose ROE fails to exceed the average 10-year bond yield by approximately 100 basis points. Should the low-end outlier test continue to be based on a fixed value relative to the costs of debt or (a) should it be based on its value relative to the median (i.e., less than 50 percent of the median); or (b) still reflect the cost of debt but vary based on interest rates?

D4.b. How, if at all, should the Commission's approach to outliers vary among different financial models?

D5. How, if at all, does the Commission's use of credit ratings in ROE determinations incentivize public utilities to behave in certain ways, such as issuing more debt, and does this affect public utilities' credit ratings?

D6. What would be the impact of the Commission modifying the credit rating screen to include all investment-grade utilities in the proxy group?

D7. To what extent do credit ratings correspond to the ROE required by investors?

D8. The Commission excludes from the proxy group companies with merger activity during the six-month study period that is significant enough to distort study inputs. Should the Commission continue using our existing merger screen?

D8.a. If so, should the Commission revise its standards for what conduct constitutes merger and acquisition activity?

D9. What circumstances or factors, if any, warrant an adjustment from the midpoint/median to other points within the zone of reasonableness (e.g., lower or upper midpoint/median)?

D10. The Commission currently uses midpoints to determine the central tendency of the zone of reasonableness when determining RTO-wide ROEs. Should the Commission adopt a policy of using medians for this purpose?

D10.a. Would the use of multiple ROE methodologies, as proposed in the *Coakley* Briefing Order, undercut the Commission's current rationale for using the midpoint in RTO-wide base ROE?

D10.b. Should the size of the proxy group be considered in this decision?

D11. Can the Commission continue to construct proxy groups of sufficient size for natural gas and oil pipeline companies using the DCF methodology, or in general for the alternative methodologies, particularly considering the increased amount of merger and acquisition activity involving master limited partnerships (MLPs) and the multiple recent conversions of MLPs to C-corporations?

E. Financial Model Choice

35. In addition to the DCF model, the Commission seeks comment on other financial models that investors use to evaluate utility equities, the strengths and weaknesses of each of those models, and whether the Commission should weigh certain financial models over other models based on their respective characteristics.

E1. What models do investors use to evaluate utility equities?

E2. What role do current capital market conditions play in the choice of model used by investors to evaluate utility equities?

- E2.a. If capital market conditions factor into the choice of model, how do investors determine and evaluate those conditions?
- E3. Are any models thought to be superior or inferior to others? If so, why?
- E4. How are alternative models redundant or complementary with each other and/or the DCF model?
- E5. To what extent do alternative models avoid any deficiencies of the DCF model and/or operate better in diverse capital market conditions?
- E6. To the extent that investors use multiple models, should the Commission combine them in its analysis or use the “best” one that would apply in all market conditions?
- E7. If the Commission were to consider multiple models, how should it weigh them?
- E8. To what extent is it reasonable for the Commission to use a simplified version of a model that does not reflect all the variables that investors consider?
- E8.a. Is the use of a simplified model justified for ease of administration and predictability of result?
- E9. How, if at all, should the Commission consider state ROEs?
- E9.a. How and why do state ROEs vary by state?
- E9.b. How are certain state ROEs more or less comparable to Commission ROEs?
- E10. If the Commission considers state ROEs, how should it compare FERC-jurisdictional transmission ROEs with state ROEs that apply to utilities that are (a) distribution and transmission companies; or (b) distribution, generation, and transmission companies?
- E11. To what extent, if any, should the Commission exercise judgment in using financial models to set ROEs under various capital market conditions?

F. Mismatch between Market-based ROE determinations and Book-Value Rate Base

36. The DCF and CAPM models determine a percentage ROE based on market prices of the proxy companies. That percentage ROE is then applied to the book value of the rate base to calculate the monetary ROE included in a utility's cost of service. For the last three decades, the market-to-book ratios of the companies that the Commission uses in proxy groups have generally been substantially in excess of one. The Commission seeks comment on the mismatch between market-based ROE determinations and book-value rate base and whether this mismatch is a problem, and how the Commission should address this issue.

F1. Does the mismatch between market-based ROE determinations and a book value rate base support current market values? Is this mismatch a problem?

F2. Why have most or all utility market-to-book ratios consistently exceeded one?

F3. How should the ROE level be set relative to the cost of equity?

F4. Should the Commission revise our use of these models to account for the mismatch between market-based ROE determinations and book-value rate base? If so, how? For example, should the Commission adjust the dividend yield used in the DCF model to represent a yield on book value rather than a yield on stock price?

F5. Should the Commission consider adjusting ROEs to account for market-to-book ratios above or below one? Would doing so introduce circularity into Commission ROEs by setting the ROE at whatever level of earnings the market expected, rather than making an independent assessment of the appropriate ROE?⁶⁰

⁶⁰ See *Orange & Rockland Utilities, Inc.*, 44 FERC ¶ 61,253, at 61,952 (1998).

G. First Prong of ROE Determination

37. In the *Coakley* and MISO Briefing Orders, the Commission proposed that, in order to find an existing ROE unjust and unreasonable under the first prong of FPA section 206, the ROE must be outside a range of presumptively just and reasonable ROEs for a utility of its risk profile, absent additional evidence to the contrary. For average risk utilities, the range of presumptively just and reasonable ROEs would be the quartile of the zone of reasonableness centered on the central tendency of the overall zone of reasonableness. For below or above average risk utilities, that range would be the quartile of the zone of reasonableness centered on the central tendency of the lower or upper half of the zone of reasonableness, respectively. The Commission seeks comment on how the Commission determines whether an existing ROE is unjust and unreasonable under the first prong of FPA section 206 and whether the quartile approach that the Commission proposed in the *Coakley* and MISO Briefing Orders is reasonable.

G1. How should the Commission determine if existing ROEs are just and reasonable?

G2. Is the quartile approach that the Commission proposed in the *Coakley* and MISO Briefing Orders appropriate? If not, how should the Commission revise this methodology?

G3. When a successive complaint is filed while the current ROE is being adjudicated (i.e., a pancake complaint), should the subsequent complainant be required to make a prima facie showing of sufficient change in market conditions to meet the *Coakley* and MISO Briefing Order's proposed determination of whether an existing ROE remains just and reasonable? If so, what type of information or showing should the complainant provide to demonstrate that market conditions have changed, and what standard should the Commission apply when assessing whether to deny the subsequent complaint without setting it for hearing?

G4. In single utility rate cases, the Commission determines the central tendency of the zone of reasonableness based on the median of the proxy group ROEs. Is the approach outlined in the *Coakley* and MISO briefing orders appropriate in single utility rate cases given that the proxy company ROEs tend to cluster near the center of the zone of reasonableness, making the middle quartile relatively narrow?

G4.a. Would it be reasonable to determine the central tendencies of the upper and lower halves of the zone of reasonableness for single utilities based on a midpoint analysis, so as to produce approximately equal ranges of presumptively just and reasonable ROEs for below average, average, and above average risk utilities?

H. Model Mechanics and Implementation

38. The Commission seeks comment on the mechanics and implementation of the DCF, CAPM, Expected Earnings, and Risk Premium models. Specifically, the Commission seeks comment on general issues that affect multiple models, such as the underlying data that the models rely on, and also seeks comment on the mechanics specific to each of the four respective models.

1. General issues/issues that affect multiple models

H.1.1. Are IBES data a good proxy for “investor consensus?”

H.1.1.a. If not, are there better alternatives, such as Bloomberg, Zacks, S&P Capital, Morningstar, and Value Line?

H.1.1.b. Should the Commission combine data from multiple sources?

H.1.1.c. What weight, if any, should be given to an estimate if the number and identity of analysts contributing to the estimate is not available?

H.1.2. To what extent does model risk affect all ROE methodologies?

H.1.3. The DCF model incorporates data at the parent/holding company level (*e.g.*, stock price). The Commission adjudicates cases at the operating

company level, for which there is no public data like stock prices, growth rates, and betas. What impact does this disparity have on the results of the DCF and other models?

H.1.4. Should the Commission continue to rely on the efficient market hypothesis, which underlies the DCF and CAPM models? Why or why not?

H.1.4.a. If yes, should the Commission continue to employ outlier screens, M&A screens, etc., for the DCF and CAPM models since these models need to incorporate all relevant information?

H.1.5. Should growth rates be based on Value Line, IBES, or alternative estimates?

H.1.6. Should the same growth rate sources be used across models, if more than one model is used to determine the ROE?

2. **Model-Specific Questions**

a. **DCF**

H.2.a.1. Should the Commission continue to use a dividend DCF model or should the Commission use a different DCF model, for example, one based on free cash flow?

H.2.a.2. Could terminal stock value be used in place of long-term growth projections? If so, how should terminal stock value be determined?

H.2.a.3. Do investment analysts project earnings/dividends growth beyond five years, and if not, why not, and is GDP an appropriate proxy for long-term growth?

H.2.a.4. How should the Commission weight short-term and long-term earnings/dividend growth projections?

H.2.a.5. The Commission uses a constant growth DCF model. Should the Commission consider using a multi-stage DCF model? If so, how would the Commission determine the length of each stage of a proxy company's growth?

H.2.a.6. Are six months of average high/low historical monthly stock prices an appropriate measure for the current stock price "P"?

b. **CAPM**

H.2.b.1. If the market risk premium is determined by applying the DCF methodology to a representative market index, should a long-term growth rate be used, as in the Commission's two-step DCF methodology?

H.2.b.2. Beta is a measure of a security's risk relative to the broader market, such as the S&P 500, not of its absolute risk. Do CAPM's assumptions break down if *both* utility stocks and the broader market become riskier over time on an absolute basis, but the relative increase in risk in utility stocks rises more slowly?

H.2.b.3. What are appropriate data sources for the beta value?

H.2.b.4. Should the Commission employ more sophisticated versions of the CAPM model that consider more variables instead of only beta, such as the Fama-French Model?⁶¹

c. Expected Earnings

H.2.c.1. Should the use of utilities in the proxy group for the Expected Earnings model be predicated on the Expected Earnings analysis being forward-looking?

H.2.c.2. What, if any, concerns regarding circularity are there with using the Expected Earnings analysis to determine the base ROE, as opposed to using the analysis for corroborative purposes?

H.2.c.2.i. If there are circularity concerns, are there ways to mitigate these concerns for the Expected Earnings analysis? If these concerns exist, are these concerns more significant than those surrounding the DCF methodology, which effectively separates Expected Earnings and ROE into its dividend yield and growth rate subcomponents?

d. Risk premium

H.2.d.1. Should the analysis be historical or forward-looking?

H.2.d.2. Is a Risk Premium analysis compatible with a finding of anomalous capital market conditions? Why or why not?

H.2.d.3. Unlike the financial models discussed above, the Risk Premium analysis produces a single ROE rather than a zone of reasonableness. Does this characteristic require the Commission to use the Risk Premium model differently than the other models?

H.2.d.3.i. Is there a method by which the Risk Premium ROE could be adjusted upward for an above average utility or downward for a below

⁶¹ The Fama and French Model is an asset pricing model that takes into consideration that value and small-cap stocks outperform markets on a regular basis. The model initially considered two factors in addition to the CAPM model: the size risk and value risk factors to the market risk factor in CAPM. Later in 2015, two additional factors were added: profitability and investment. *See generally* Eugene F. Fama, *et al.* “Common risk factors in the returns on stocks and bonds,” *Journal of Financial Economics* (1993); Eugene F. Fama, *et al.* “A Five-Factor Asset Pricing Model,” *Journal of Financial Economics* (2015).

average risk utility? If not, is it reasonable to consider the results of a Risk Premium analysis when determining the ROE of an above or below average risk utility?

H.2.d.3.ii. Is it appropriate to use a Risk Premium analysis when conducting the first prong of the section 206 evaluation?

III. Comment Procedures

39. The Commission invites interested persons to submit comments on the matters and issues proposed in this notice, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due **[INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and Reply Comments are due **[INSERT DATE 120 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Comments must refer to Docket No. PL19-4-000, and must include the commenter's name, the organization they represent, if applicable, and their address.

40. The Commission encourages comments to be filed electronically via the eFiling link on the Commission's web site at <http://www.ferc.gov>. The Commission accepts most standard word-processing formats. Documents created electronically using word-processing software should be filed in native applications or print-to-PDF format and not in a scanned format. Commenters filing electronically do not need to make a paper filing.

41. Commenters that are not able to file comments electronically must send an original of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE, Washington, DC 20426.

42. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters on this proposal are not required to serve copies of their comments on other commenters.

IV. Document Availability

43. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (<http://www.ferc.gov>) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. eastern time) at 888 First Street NE, Room 2A, Washington, DC 20426.

44. From the Commission's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

45. User assistance is available for eLibrary and the Commission's website during normal business hours from the Commission's Online Support at (202) 502-6652 (toll free at 1-866-208-3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at public.referenceroom@ferc.gov.

By direction of the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.