Comments of Sabina U. Joe On Inquiry Regarding the Commission's Policy for Determining Return on Equity

I am Sabina U. Joe of 9313 Marycrest Street, Fairfax, Virginia 22031. I offer the following comments as an interested ratepayer and as the sole Trial Staff expert witness on ROE for the Federal Energy Regulatory Commission in:

- Martha Coakley, Massachusetts Attorney General, et al. v. Bangor Hydro-Electric Company, et al., Docket Nos. EL11-66-001, et al. and
- Environment Northeast, et al., v. Bangor Hydro-Electric Company, et al., Docket Nos. EL13-33-000, et al.

In addition, as Trial Staff witness I have participated in numerous privileged and confidential settlements involving the establishment of an ROE for successor owners of Atlantic Path 15, the Potomac Appalachian Transmission Highline (PATH), non-investment grade public utilities, and single electric utilities. Additionally, as Trial Staff lead technical expert I have participated in numerous Commission proceedings involving issues such as formula rates for electric transmission, affiliate abuse including in relation to the year 2000 rolling blackouts in California, proposed sale of Pacific Gas & Electric Company hydro-electric power plant portfolio, reliability must run compensation, and other jurisdictional issues set for hearing.

Submitted by: Sabina U. Joe Date: June 26, 2019

A. Role and Objectives of the Commission's Base ROE Policy31. A.1.-A.2.

The questions A.1 through A.4 in this section address only administrative efficiency issues and not the role of an ROE in supporting the authorized objective of providing for a nationally secure energy system in the public interest.

In doing so, the Commission marginalizes its responsibility under the Federal Power Act by presenting in the Coakley Briefing Order¹ merely a few simple mechanical tools as the total cure for the U.S. Court of Appeals' sweeping objection in Emera Maine to the Commission's failure to "establish any 'rational connection' between the record evidence and its decision" 2 in the now reversed and vacated Opinion Nos. 531 3 The purportedly "curative" new "policy" offers a first step quantitative *litmus test* for determining when an existing ROE is unjust and unreasonable, the use multiple financial models to estimate an ROE, and a quantitative method for *placement* of an ROE in a zone of reasonableness. That proposed Commission methodology response is silent or numb to the rampant multiple violations of financial, economic, legal and statistical principles that occurred through the corrupt application of methods and **Commission precedent** in its cobbling together of the now reversed Op. No. 531 ROE result. Gross incompetence or worse is illustrated, for instance, in Opinion No. 531-B order on rehearing at P 119 where gross misinterpretation of Trial Staff testimony prevented Commission consideration of a Goldman Sachs

¹ Martha Coakley v. Bangor Hdyro-Elec. Co., 165 FERC PP 61,030 (2018) (Coakely Briefing Order).

² Emera Maine v. FERC, 854 F.3d9 (D.C. Cir. 2017) at 28 citing Elec. Power, 136 S.Ct. at 782.

³ Coakley, Mass. Attorney Gen.v. Bangor Hydro-Elec.Co., Opinion No. 531, 147 FERC PP 61,234, order on paper hearing, 149 FERC PP 61,032 (2014), order on reh'g, 150 FERC PP 61,165 (2015).

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forward-looking market risk premium estimate for the CAPM⁴ analysis which conflicted with the NETO (New England Transmission Owners) witness' personally developed market risk premium estimate ultimately favored in the Commission Op. No. 531 decision.⁵

The Commission's proposed "ROE policy" would deny customers the bedrock Federal Power Act guarantee of protection against excessive rates, would not necessarily increase the predictability of ROE determinations and may in fact retard determinations of ROE particularly for incumbent public utilities which are financially challenged, but would decidedly favor the perpetuation of the old capital-intensive solutions to the nation's energy challenges to the detriment of non-capital intensive and new solutions such as those separately promoted through Order No. 1000 coordinated planning, demand response, cyber security initiatives, and expansion of renewable resource capacity. Like the medieval "benefit of clergy," it would primarily insulate incumbent providers of electricity from the Commission's power and obligation to set aside rates not in the public interest.

Predictability of ROE and Stakeholder Participation

Predictability of the ROE would be thwarted to the extent that barriers to participation inherent in the Commission proposed methodology wold only encourage participants to complicate settlement negotiations and "even-up" leverage by increasing the number of cost of service issues on the table. Reopening an ROE

⁴ Capital Asset. Pricing Model financial ROE estimation model.

⁵ P 119 of Op. 531-B falsely states that Trial Staff developed a market risk premium estimate for the CAPM analysis from a sample of only 20 companies. Footnote 253 within P 119 references Trial Staff testimony Ex. S-1 at 98 which clearly shows that Trial Staff used the broad market risk premium estimate made by the global equity manager for Goldman Sachs and applied that to the NETO witness' own preferred 20 company proxy group for a CAPM analysis demonstrating the implausibility of the vastly higher NETO CAPM results.

is characterized as a "general re-opener". It creates the right to re-open any aspect of the rate. *See, e.g., Transource Missouri, LLC*, 141 FERC 61,075 at P 71; Order No. 679 at P 23; and Order No. 890 at P 767. Although a settlement ROE must be separately and explicitly stated, trade-offs made in privileged and confidential settlement negotiations take the predictability of the ROE, and indeed predictability of the whole rate, largely out of Commission hands. Horse-trading would replace reasoned rate-making subject to Commission precedent, principles, and discretion.

The barriers to participation mostly affect customer groups and financially troubled public utilities or financially troubled public utility projects.

It has been my experience through 2015 that electric cooperatives, municipalities, state sponsored consumer interest agencies, non-governmental consumer interest groups, and financially challenged smaller or troubled public utilities generally lack the resources to expertly address ROE, capital structure, and debt cost issues. When a coalition of customers does marshall resources to seek rate relief under Section 206(a), they usually address cost-of-service issues but defer to Commission Trial Staff's expert knowledge of Commission policy, precedent, and finance to impartially and fairly address ROE and capital structure.

Proceedings for financially troubled public utilities, such as those affected by catastrophic forest fires or adverse market conditions, are likely to devolve into settlement mode because the proposed Commission methodology most egregiously biases their ROE results and because these utilities lack the economic and time resources to sustain prolonged litigation. Financially troubled utilities are likely to have a non-investment grade credit rating or near non-investment grade credit rating. There exist usually too few electric utilities with those lower

credit ratings to construct an adequate size comparable risk proxy group, and so a skewed risk proxy group must be applied. (All proxy candidates with a non-investment grade credit rating under either S&P or Moodys are disqualified under the provisions of the U.S. Supreme Court's *Bluefield*⁶ decision that utility returns should not reflect the profits of speculative grade ventures. The Commission requires a proxy group to have at least four comparable risk members to adequately ensure the statistical validity of the financial model calculation. See, e.g, Opinion No. 445 at 61,265 and Golden Spread Electric Cooperative, Inc, et al., 123 FERC 61,047 at P 59 (2008)).

Skewed risk proxy groups are most likely to trigger the highly contested upward placement of the ROE in a zone of reasonable returns. Proxy groups with skewed return outcomes are also likely to trigger the highly objectionable termination of a Sec. 206(a) proceeding under the biased proposed "First Prong" methodology.

Barriers to Participation

The Commission proposed "First Prong of ROE Determination" constitutes an unacceptable barrier to fair participation by customers, financially challenged public utilities, and Trial Staff as I detail under my response to part G. First Prong of ROE Determination of this NOI.

Secondly, while I prefer the use of multiple ROE models to improve the accuracy of Commission ROEs, a formidable barrier to most participants would be thrown up if the Expected Earrings model and/or if the "forward looking CAPM" model are required or preferred by the Commission. The Expected Earnings model, a version of the comparable earnings test model, at this time produces the highest ROE estimates among all the financial models because it perpetuates existing

⁶ Bluefield Waterworks & Improvement Co. v. Pub. Serv.Comm'n, 262 U.S. 679, 692.

ROEs when declining market conditions arguably warrant a lower ROE. Inappropriately higher ROE results would largely eliminate Sec. 206(a) challenges to an existing ROE and would immunize newly proposed Sec. 205 increases to the ROE. The comparable earnings test model has been thoroughly discredited by the finance community because it is based on circular reasoning.

Another barrier arises if the Commission decides to prefer the purportedly "forward looking" CAPM model *per se* as compared to other CAPM analyses. First, the purportedly "forward looking" CAPM analysis developed from scratch by the NETOs witness in the Op. 531 proceedings cannot be checked by opposing participants within the time limitations of most proceedings. Secondly, customer groups and Trial Staff simply do not have the resources to perform their own DCF analysis on the entire domestic dividend paying stock market as an interim step in calculating their CAPM market risk premium component.

Most importantly, by ignoring and implicitly letting stand the multiple violations of financial, economic, legal and statistical principles and reasoned Commission precedent that occurred in the Op. 531 decision, the proposed Commission methodology presents a formidable bias and "Wild West free for all" regulatory environment that discourages participation in litigated proceedings.

A3. The suggestion to apply the same ROE to all utilities in RTOs/ISOs based on the most recent proceeding in that RTO or ISO, would disconnect the ROE from an appropriate level of investor compensation for risk and violates fundamental *Hope* and *Bluefield* standards. It is tantamount to suggesting that it would be appropriate if Google were awarded the same base ROE for building the first of its kind underwater transmission cable linking Manhattan to mainland power sources, as the base ROE awarded to a an existing utility for construction of routine transmission plant. I do not support the practice of establishing a

one-size-fits-all ROE for all jurisdictional members of an RTO/ISO. The merits of that practice have not been adequately supported by the Commission.

A4. The vintage of past capital investment does not have a demonstrated direct and significant causal link with appropriately satisfying the capital attraction standard and setting the base ROE today.

A4b. An annual national default ROE is akin to establishing centralized national planning of utility service. The ROE would no longer be a tool for investors to vote on what they think is an appropriate investment of their economic resources or what they think is good management. If there is no horse race, and no ability to bet on a particular horse, there is no longer a capitalist system based on free choice and competition to determine winners and losers and the allocation of economic resources consistent with the desires of, and for the benefit of, a nation of consumers.

C. Performance of the DCF Model

33. C3. As discussed by my former professor Dr. Roger Morin, the DCF methodology performs correctly over a wide range of interest rates. There is no evidence to support NETOs claim that the DCF model did not reflect the true cost of capital for utilities during the Great Recession of 2008-2012 when every other enterprise faced similarly challenging profitability conditions.

D. Proxy Groups

34. D1.*a*,**b**,**D2.** Please refer to filed testimony of Trial Staff witness Sabina U. Joe in the Op. No. 531 proceedings and to the Commission rationale and findings in established Commission precedent on these subjects. For **D.1.b** and **D2, D3, and D7,** the relevant problematic issues are illustrated with regard to

ROEs for financially troubled utilities in my filed testimony in *Public Service Company of New Mexico*, Docket No. ER11-1915-002, at al., at Exhibit No. S-1, pp. 25, In 14 through p. 34, In 12 (January 10, 2012).

D6. The impact of modifying the credit rating screen to include the full gamut of investment grade utilities in the proxy group would result in a Commission ROE methodology that fails to meet the *Hope*⁷ and *Bluefield* standards requiring utility returns to be commensurate with enterprises of corresponding risk.

E. Financial Model Choice

35. I support use of the composite results of a DCF model, CAPM model, and Risk Premium model to improve the accuracy and validity of Commission ROEs.

E3.

(1). For the "First Prong" analysis the Commission should reject all proffered CAPM analyses based on a homegrown (developed from scratch by a party in the proceeding) market risk premium estimate because (a) they usually cannot be adequately checked and challenged by opposing participants within the limited timeframe of settlement or litigation proceedings and (b) because the Commission should err on the side of allowing a Sec. 206(a) challenge to go forward to more in-depth investigation in a hearing rather than foreclose it by making a premature finding based on a dubious "presumptively" lawful zone of reasonableness.

For the "second prong," the Commission should allow, but not *per se* prefer, a homegrown market premium estimate based on erroneous clam that it is "forward looking" in contrast to other forecasts or recent "backward looking" market

⁷ Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591(1944) ("Hope"); Bluefield Waterworks Improvement Co. V. Public Service Commission, 262 U.S. 679, 692 (1923) ("Bluefield").

risk premium estimates by recognized authorities in the financial, economic, and business communities. There is a real danger that the homegrown market risk premium reflects unrepresentative data in a changing market. In contrast, market risk premium estimates based on broader recent time periods and forecasted economic conditions are likely to provide more representative results.

The Expected Earnings Approach and other versions of the Comparable Earnings Approach model have been thoroughly discredited by the academic financial community. Those accounting based approaches fail because real world accounting earnings are influenced by, for example, tax strategies, mergers and spin-offs, etc. that have little to do with the the capital attraction standard. For example, a lack of accounting earnings by firms such as Uber or the early Amazon was not indicative of their ability to raise capital in the equity and debt markets.

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

F3. The question appears to suggest that Base ROEs should be set on some basis other than cost, which has been the principal foundation of Commission regulation sanctioned by the courts. Does this suggest you seek to ignore financial and economic principles in order to set ROE levels on some arbitrary and capricious basis for undisclosed purposes? The question needs to be answered with reflection on court opinion on benefit and cost principles supporting Commission authority to enact Order No. 1000, the Federal Power Act, and the U.S. Constitution.

G. First Prong of ROE Determination

37. Please refer to my response to A. Role and Objectives of the Commission's Base ROE Policy. The Commission's "First Prong" or litmus test for finding an existing ROE unjust and unreasonable under the *dual but not necessarily "temporally sequentially stepped"* burden of Sec. 206(a)⁸ The proposal to use it to foreclose, as an initial matter, a hearing or investigation of what a new just and reasonable rate is, is itself unjust and unreasonable.⁹ That would undercut the Commission's indefeasible obligation under Section 206 to replace rates which are contrary to the public interest and it would effectively deny consumers the bedrock protection against excessive rates mandated by the FPA. As discussed below, *Emera Maine* has already demonstrated that the procedure is unworkable.

The Coakely Briefing Order "First Prong" litmus test presupposes:

- 1. establishment of a "broad range of *potentially* lawful ROEs" by averaging the results of a DCF, CAPM, and Expected Earnings analyses, (PP 27, 56)
- dividing that broad range into "Zone of Reasonableness Quartiles" (PP 27-28 and Figure 1) where the middle quartile is centered on either the midpoint/median consistent with the Commission's past use, and
- 3. then, pursuant to this framework, finding that if an existing ROE falls within the applicable quartile, this "will support a holding that the existing ROE has not been shown to be unjust and unreasonable under the first

⁸ As demonstrated by Judge Antonin Scalia in *Papago Tribal Utility Authority v. FERC*, 723 F.2d 950 (D.C. Cir. 1983), an appropriate finding that an existing rate is unjust or unreasonable may well rely on extrapolation from record evidence developed in a simultaneous investigation of what is a new just and reasonable ROE. While a finding that an existing rate is unjust and unreasonable must precede the **setting** of a new rate, this finding need not precede and preclude investigation on the second burden of what is a new just and reasonable rate.

⁹ As Judge Scalia admonished in *Papago*, the Supreme Court tells "us to look at the substance of the requirements of Sec. 206(a) rather than to its rigid formalities, *FPC v. Sierra Pacific Power Co., supra,* 350 U.S. at 353, 76 S. Ct. at 371"

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prong of the FPA Section 206, absent additional evidence to the contrary". (P 28).

This is unworkable if the midpoint is used to establish the quartiles for a targeted diverse group of utilities and the proxy group's risk profile is skewed and/or the proxy group's pattern of return outcomes is skewed. The proposal mistakenly confuses observed "return outcomes" as being synonymous with "measures of risk" and further mistakenly presumes that the observed "return outcomes" of the individual proxy group members fall in a nice normal distribution.

For example, even if there is no risk-based skew (as indicated by credit ratings), the observed "return outcomes" of the proxy group may be skewed. In that case, quartiles centered on the midpoint (as illustrated in Figure 1 Zone of Reasonableness Quartiles of the *Coakley Briefing Order*¹⁰) could result in a middle quartile containing zero observed "return outcomes", only one "return outcome" in the upper quartile, and a bunch of observed "return outcomes" in the lower quartile of Figure 1. If the existing ROE falls in the empty middle quartile, the proposed "First Prong" methodology says this would support a finding that the existing ROE is presumptively just and reasonable, and the proceeding would be terminated. Obviously, the middle quartile is unrepresentative of the ROE outcomes of the comparable risk proxy members. What is defective is the use of the midpoint as a measure of central tendency and the use of "quartiles" centered on the midpoint.

This is a failure to understand statistical principles and simply repeats an error already highlighted in *Emera Maine* where the Court noted that the Commission alluded to its "traditional" reliance on measures of "central tendency" to select a 10.57 percent base ROE that was "notably higher than 35 of the 38 data points

¹⁰ Coakley Briefing Order at P 27, Figure 1.

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FERC used to construct its DCF zone of reasonableness." The Court concluded that "FERC failed to establish a 'rational connection' between the record evidence and its decision." 854 F.3d at 28 citing Elec. Power, 136 S.Ct. at 782.

Myopic focus on the flawed tool's basis point results ignores the thundering reality is that in the case of one utility a single basis point might be worth \$1,000 while in the case of another utility one basis point may be worth \$700,000 or several million dollars to consumers. As a result, the flawed "First Prong" methodology would trample on *Hope's* holding that a rate is recognized as unjust and unreasonable by its "consequences"¹¹

Legitimizing the proposed handy but flawed quantitative tool as sufficient evidence to support a Commission finding that an existing rate remains just and reasonable would unreasonably deny customers or competitors access to Sec. 206(a) rights. This could easily happen if Commission advisory staff use it as a basis to decline to set certain rate complaints for hearing. Or, if set for hearing, an Administrative Law Judge or the Commission itself might rely on it to pronounce summary judgment in favor of the an existing ROE. Or its application can simply discourage less sophisticated utility customers, or customers with meager financial resources, from pursuing their case.

H. Model Mechanics and Implementation

My views on most of these questions are record evidence in the *Coakley* and *ENE* proceedings, Docket Nos. EL11-66 and EL13-33, respectively.

¹¹ Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591.

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