Witness OCS – 2S Brevitz

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

	)	
In the Matter of Carbon/Emery Telcom Inc.	)	Docket No. 15-2302-01
Application for an Increase in	)	
Utah Universal Service Fund Support	)	Surrebuttal Testimony
	)	of David Brevitz, C.F.A.
	)	For the Office of
	)	Consumer Services
	)	

NON-CONFIDENTIAL – REDACTED VERSION

September 18, 2015

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is David Brevitz. My business address is Brevitz Consulting Services, 3623 SW Woodvalley Terrace, Topeka, KS, 66614.

Q. HAVE YOU PREVIOUSLY FILED DIRECT TESTIMONY AND REBUTTAL TESTIMONY IN THIS MATTER ON BEHALF OF THE OFFICE OF CONSUMER SERVICES ("OCS")?

A. Yes.

Q. WHAT IS THE PURPOSE OF THIS SURREBUTTAL TESTIMONY?

A. The purpose of this rebuttal is to respond to various positions taken in the rebuttal testimony of Douglas Meredith on behalf of Carbon/Emery Telcom regarding rate of return, and to relate those positions to my direct testimony on those issues. I have read Mr. Meredith's testimony and exhibits thoroughly and while it is somewhat voluminous, the Commission should give it little weight for the reasons described in this surrebuttal testimony. The material presented by Mr. Meredith regarding the "small company premium" is the product of "data mining" permitted by advances in databases and computer technologies, which mistakes correlation for causation, and overlooks the nature of and problems with the data that is being mined. The "small company premium" hinges on existence of market inefficiencies and is an alleged measure of one market inefficiency. Since this conflicts with the established and widely held view that financial markets are efficient, the proof that the Commission should require to demonstrate the existence of the "small company premium" is that there are actual investors identifying this market inefficiency and profiting from it. Mr. Meredith provides no such evidence. I urge the Commission to adopt the rate of return recommendations contained in my Direct Testimony.

RATE OF RETURN ISSUES

Q. PLEASE IDENTIFY THE RATE OF RETURN ISSUES, AND DESCRIBE THE OVERALL BALANCE OF MR. MEREDITH'S TESTIMONY ON THOSE ISSUES IN THIS CASE.

A. In my Direct Testimony, I addressed three important elements in the computation of rate of return under the Commission's rules in this matter – the appropriate capital structure to be used, the appropriate state rate of return on equity to be used, and the appropriate interstate overall rate of return to be used. Mr. Meredith devotes the great majority of his testimony and exhibits to only one of those elements – which certainly is important on its own – the state rate of return on equity. Of the twelve pages that comprise Mr. Meredith's rate of return testimony, only one question and answer is provided for the appropriate capital structure and the appropriate interstate rate of return. I believe Mr. Meredith's testimony is scant on these two items because there really is not much to argue about with the position OCS has taken on those two issues. The

OCS testimony acknowledges where the Commission has clearly spoken on each one, and is in harmony with Commission requirements.

Q. IS THE OFFICE TAKING POSITIONS "UNREASONABLY DESIGNED TO SIMPLY PRODUCE A LOW RATE OF RETURN FOR CARBON/EMERY" AS ALLEGED BY MR. MEREDITH AT LINE 117 OF HIS REBUTTAL TESTIMONY?

A. Absolutely not. Each of the recommendations in my Direct and Rebuttal testimonies on rate of return has firm foundation in the Commission's rules, regulatory policy, financial management and modern portfolio theory. If all the Office sought was the lowest possible rate of return as suggested by Mr. Meredith, there are additional recommendations I <u>could</u> have made <u>with solid foundation</u> to produce a lower rate of return than was recommended in my Direct Testimony. If that was my goal – which it is not – I had the basis and foundation to recommend a hypothetical capital structure of 70% debt and 30% equity, as noted in my testimony at lines 168 – 169. Instead, I recommended a 50/50 hypothetical capital structure, and I reiterate that recommendation here. Also, if that was my goal – which it is not – I would have investigated Carbon/Emery's current cost of debt rather than accepting a cost of debt for debt no longer on Carbon/Emery's books as a reasonable proxy. In the current interest rate environment perhaps a lower cost of debt could be justified.

Instead, I accepted Carbon/Emery's proffered cost of debt in this case, and I reiterate that recommendation here. Mr. Meredith's criticism is unwarranted and unfounded, as there is a proper and rational foundation for each of my recommendations on rate of return.

Furthermore, Mr. Meredith's testimony quite clearly suffers from the very weakness that he accuses (without support) my testimony of having. Mr. Meredith appears to have taken many opportunities – which are not supported by financial or regulatory practice or modern portfolio theory – to create additive factors to increase his recommended return on equity. Here I am referring to Mr. Meredith's rejection of the DCF methodology and various additions he seeks to make to return on equity for liquidity, small size, and levered beta.

Q. MR. MEREDITH'S TESTIMONY CONTAINS SPECULATION AND CONJECTURE CLAIMING TO KNOW WHY THE FCC HAS NOT YET ACTED ON THE FCC STAFF REPORT ON RATE OF RETURN. SHOULD THE COMMISSION GIVE THIS SPECULATION AND CONJECTURE ANY WEIGHT?

A. No. Mr. Meredith makes the following statements in an attempt to rebut my use reference to the rate of return recommendation contained in the FCC Staff Report:

- Line 182, "the rebuttals of the [FCC] staff report provided by NTCA and the Rural Broadband Alliance leveled a broadside against the staff findings to the extent that the FCC has let the issue remain dormant for two years and no action has been taken."
- Line 193, "from the FCC's docket we have one staff report that was thoroughly rebutted."
- Line 196, "in light of the evidence, the FCC has let the issue remain idle"
- Line 211, "the FCC as an expert agency in regulating telecommunications carriers has examined the issues, pro and con, and has deferred taking actions".

The Commission should not accept Mr. Meredith's speculation and conjecture regarding what is on the minds of the FCC commissioners regarding this report, or why the FCC has not yet acted on the Staff Report. Mr. Meredith has not provided any basis to support that he knows why the FCC is doing what it is doing regarding the Staff Report. As this Commission no doubt can well appreciate given its own responsibility to manage its own docket schedule, the FCC sets its own schedule of when it takes matters up and when it doesn't. It is my experience that commissions do not allow parties to make any conclusions on facts or policy from circumstances and timing of when a commission does or doesn't take a matter up for consideration. The Commission should give no weight to Mr. Meredith's speculation and conjecture that because time has elapsed since the FCC Staff Report was filed, and rural local exchange company groups filed comments opposing the conclusions contained in the Report, that in fact the FCC has rejected the Report and its conclusions. In fact, as described below the American Cable Association filed a Request for Reconsideration on use of the FCC staff return in the cost modeling to determine Connect America Fund Phase II support levels, stating that the FCC staff return was "too high". The FCC denied this reconsideration request and found that the FCC staff return was in fact reasonable.[1] Mr. Meredith's speculation and conjecture would be equally applicable to infer that because the FCC has not yet acted, the FCC agrees with those commenters that the FCC Staff Report provides a rate of return that is too high.

The Commission should also note that one of the "rebuttals" to the FCC Staff Report that Mr. Meredith states "levels a broadside" against that Report is the Exhibit 4 authored by Mr. Vincent Wiemer who as explained below the Kansas Corporation Commission found not to be a credible witness on rate of return issues. This should cause the Commission to carefully scrutinize the merit of Mr. Meredith's Exhibit 4.

[1] Memorandum Opinion and Order; In the Matter of Connect America Fund and High Cost Universal Service Support; WC Docket Nos. 10-90 and 05-337; FCC 14-180; Released November 12, 2014. This Order is attached as Exhibit OCS 2S-1.

Q. AT LINE 180 MR. MEREDITH STATES "WHAT SHOULD INFORM THE COMMISSION IN THIS PROCEEDING IS THE FACT THAT <u>THE FCC DID NOT ACCEPT THE CONCLUSIONS OF THE STAFF REPORT</u>" (<u>EMPHASIS IN ORGINAL</u>). IS THIS ACCURATE?

A. No. While the FCC has not yet acted on the FCC staff Report on Rate of Return for reasons known only to the FCC itself, the FCC has directly employed the FCC staff recommended rate of return to determine support amounts for Phase II of the Connect America Fund or "CAF II" funding. Specifically in the cost model used to determine CAF II support amounts, the FCC staff used an 8.5% rate of return as a model input, based on the mid-point of the rate of return range contained in the FCC Staff Report on Rate of Return: 7.84% to 9.20%. The FCC addressed the application for review of this model input by the American Cable Association and specifically upheld the 8.5% rate of return from the FCC Staff report stating: "we are not persuaded by ACA's argument that the cost of money selected by the Bureau is unreasonably high"; and, "we find the Bureau's selection of the input values for the cost of money and the subscription rate to be reasonable, clearly reflecting the Bureau's consideration of the record before it, its own analysis, and its predictive judgment of future conditions."[2] The midpoint of the rate of return range established by the FCC Staff Report on Rate

[2] Id, at page 3.

of Return – 8.5% -- is in use today to determine CAF II support amounts from the federal Universal Service Fund.

<u>RATE OF RETURN FOR INTERSTATE SERVICES</u>

Q. WHAT ANALYSIS DOES MR. MEREDITH PROVIDE IN REBUTTAL TO THE RECOMMENDATION IN YOUR DIRECT TESTIMONY THAT THE COMMISSION USE THE 9.40% OVERALL RATE OF RETURN FROM THE FCC FORM 492 REPORT?

A. Mr. Meredith's provides no analysis whatsoever in his short answer at line 423 that comprises his full response on that important cost of capital input. Mr. Meredith states "Mr. Brevitz is incorrect in proposing another rate [beside the company–proposed 11.45%]. The development of the interstate rate has been defined by Commission rule." This is only assertion, and Mr. Meredith's rebuttal is silent and says nothing more on precisely <u>how</u> the 11.45% "has been defined by Commission rule", and therefore does not explain how it could be appropriate under the Commission's rules to use a rate of return figure from the FCC Form 492 that pertains to only a small portion of the company's interstate capital (rate base). Mr. Meredith's mere assertion contains no factual claim to contradict the facts contained in my Direct and Rebuttal testimonies. I have thoroughly explained how the 9.40% rate of return is the correct return to use in this case in my Direct Testimony at lines 180 – 228 and in my Rebuttal testimony at lines 17 – 102. The Commission should give no weight to Mr. Meredith's unsupported assertion, and should find that 9.40% is the correct interstate rate of return for use in this case under the Commission's rule.

HYPOTHETICAL CAPITAL STRUCTURE AND "COMPARABLE COMPANIES"

Q. TURNING TO HYPOTHETICAL CAPITAL STRUCTURE, MR. MEREDITH STATES BEGINNING AT LINE 399 THAT THE 35% DEBT/65% EQUITY HYPOTHETICAL CAPITAL STRUCTURE IS "STANDARD PRACTICE IN UTAH" (LINE 399), A "LONG-STANDING PRACTICE" (LINE 411) AND GOES ON TO SAY "THE COMMISSION SHOULD CONTINUE TO APPLY THE DIVISION'S SLIDING SCALE METHOD TO ADJUST FOR CAPITAL STRUCTURE" (LINE 418). SHOULD THE COMMISSION ACCEPT THIS RECOMMENDATION?

A. No. The DPU apparently has used the 65/35 hypothetical capital structure in previous cases that were settled. This history is not documented or available as public information, so the actual extent of the use of this particular hypothetical capital structure is not clear. However, as explained in my Rebuttal Testimony at lines 104 – 123 the Commission explicitly rejected that approach as a proposed rule on capital structure in favor of individual company determinations, and appropriate fact-based ratemaking determinations. The complete Commission letter on that subject was attached to my Rebuttal Testimony as OCS 2R-2. The

Commission should accept the recommendation of a 50/50 hypothetical capital structure as contained in my Direct Testimony, based on analysis of comparable companies.

Q. MR. MEREDITH STATES THAT YOUR "COMPARISON OF LARGE COMPANIES IS UNCONVINCING" (LINE 414) AS A BASIS FOR COMMISSION DETERMINATION OF CAPITAL STRUCTURE AND LEVERAGE RATIOS. DOES MR. MEREDITH OFFER ANY ALTERNATIVE ANALYSIS OR COMPARABLE COMPANIES?

A. No. Selection of "comparable companies" for rate of return analysis is necessary and required. Mr. Meredith takes issue with the comparable companies I identified (several of which Mr. Coleman also used) but then fails to identify any replacement comparable companies for use in the analysis. Mr. Meredith provides no comparable companies, but excludes the comparable companies that I along with Mr. Coleman have identified, which begs the question of what data Mr. Meredith would use to compute rate of return. The rate of return analyst must rely on public information associated with publicly traded companies in order to perform calculations necessary to determine the cost of capital elements of capital structure and return on equity. There is no public market data for Utah telecommunications companies since these companies are not publicly held with stocks and bonds that trade in public financial markets. If there were publicly traded telecommunications companies in Utah, those companies could be considered for reasonableness for inclusion as "comparable companies" for rate of return analysis purposes. Since there are no such companies, other telecommunications companies which are publicly traded must be reviewed for inclusion in the pool of "comparable companies" for this analysis – recognizing that it is not possible to assemble a pool of companies that are direct analogs to Carbon/Emery.[3] With the adjustments identified in my Rebuttal Testimony at lines 125 – 231 I believe the pool of "comparable companies" presented in my testimony along with Mr. Coleman's is the <u>closest possible</u> pool of "comparable companies" that can be assembled for this analysis – I am aware of no other companies that can or should be included. It is reasonable to rely on the comparable companies I have selected for analysis, and it is unreasonable to criticize the companies selected without offering any alternative comparable companies or analysis. The Commission should rely upon the comparable companies selected by Mr. Coleman and me, as adjusted per the Rebuttal testimony cited above.

[3] Mr. Meredith notes that "there are only 14 publicly traded ILEC peers in the nation and only two whose line counts are comparable to small company line counts" within "1,101 small company study areas in the nation". Meredith Rebuttal, at line 300.

STATE RETURN ON EQUITY

Q. AT LINES 81 – 89 MR. MEREDITH DISCOUNTS THE EXTENSIVE CASE CITATIONS IN YOUR DIRECT TESTIMONY TO RURAL LOCAL EXCHANGE COMPANY RATE OF RETURN DETERMINATIONS BY THE KANSAS CORPORATION COMMISSION (KCC) STATING "WE SIMPLY DON'T HAVE ANY INFORMATION THAT THE RATE USED FOR RETURN ON EQUITY WAS FULLY EXAMINED IN THE CITED KANSAS CASES". IS THIS CRITICISM WARRANTED OR REASONABLE?

A. No. Every document in every case cited is publicly available on the KCC's website. Each company filing, company witness testimony, staff witness testimony, pleading, stipulation, and final Commission order is available on the website for each case. Only limited information is deemed confidential and not publicly available. In footnotes 5 and 6 of my direct testimony I included the link to the KCC website and stated that "each of these testimonies is public record" and "each of the Commission decisions is public record" on the KCC website. The cost basis for individual rural local exchange company KUSF funding has been reviewed by the KCC on a rotating basis since 1997. So at this point there is an established base of precedent from cases that have gone to hearing, and now in most cases stipulations are reached to generally accept the KCC staff-recommended revenue requirement based on KCC staff-recommended ROR as illustrated by the table at line 252 of my Direct Testimony. I cannot explain why

Mr. Meredith did not use the link provided in my Direct Testimony to review these stipulations and orders himself to seek to verify that in fact rate of return was fully examined by the parties and the Commission in each case. The only appropriate criticism here is that Mr. Meredith failed to review these public documents as he easily could have done before writing the testimony he wrote.

Q. MR. MEREDITH'S REBUTTAL SPECIFICALLY ALLEGED "ESPECIALLY ABSENT IS ANY REFERENCE OR CITATION FROM THE COMMISSION ABOUT ITS EVALUATION AND DETERMINATION OF THE RATE OF EQUITY [SIC] IN THE LAHARPE CASE." IS THIS CRITICISM WARRANTED?

A. No. As noted above, this decision by the KCC is publicly available on its website and is attached as Exhibit OCS 2S-2. Review of this KCC Order makes clear that the Commission did thoroughly review rate of return determination, and the Commission's analysis of the rate of return position expressed by the Company's consultant is scathing:

> 22. As part of the Commission's analysis of the extensive evidentiary record, the Commission also assesses witness credibility. In this proceeding, the Commission finds a substantial credibility gap between the two ROR witnesses. Staff's witness, Mr. Gatewood, incorporated his own comprehensive updated cost of equity analysis and consistently recommended this analysis as a reasonable and appropriate approach.
>
> 23. LaHarpe's witness, Mr. Wiemer, incorporated another witness's testimony in his pre-filed direct testimony to recommend a 12.5% ROE. Then, in his supplemental rebuttal testimony, Mr. Wiemer, abandoned his initial

recommendation. Instead, he opted to use Mr. Gatewood's analysis and add premia in an apparent effort to reach the highest possible ROE figure. There was no mention of his previous recommendation, and the Commission was left to ponder its application. Mr. Wiemer was certainly free to adjust his testimony as the proceeding progressed; however, wholesale abandonment of one position without reasonable explanation does have an effect on witness credibility.[4]

As noted in my Direct Testimony at line 252, the Commission adopted the 10% return on equity recommended by KCC staff's "comprehensive updated cost of equity analysis".[5] The KCC clearly fully and carefully vetted the rate of return analysis before it. This KCC Order was (and is) publicly available on the website cited in my testimony for Mr. Meredith's review.

Q. IS THE COMPANY WITNESS IN THE LAHARPE PROCEEDING ABOVE THE SAME MR. WIEMER THAT IS INDICATED TO HAVE AUTHORED THE DOCUMENT MR. MEREDITH ATTACHES AS HIS EXHIBIT 4?

A. Yes. Vincent H. Wiemer, CPA, Alexicon Consulting is indicated on the cover page of Meredith Exhibit 4 to be the author of those comments to the FCC on the FCC Staff Rate of Return report. The KCC's finding of Mr. Wiemer's lack of

---

[4] Order; State Corporation Commission of the State of Kansas; *In the Matter of Staff's Motion Requesting The Commission Order LaHarpe Telephone Company, Inc. to Submit to an Audit for Purposes of Determining its Cost-Based Kansas Universal Service Fund Support, Pursuant to K.S.A. 66-2008*; Docket No. 12-LHPT-875-AUD; June 26, 2013, at page 7 – 8. [Exhibit OCS 2S-1; or the "LaHarpe Order"]

[5] The Direct Testimony of Adam Gatewood on behalf of KCC Staff in the LaHarpe Telephone Company and Gorham Telephone Company dockets are attached as Exhibits OCS 2S-3 and OCS 2S-4, respectively. These testimonies were filed two months apart, and Mr. Gatewood verified and then relied upon the Gorham calculations for the LaHarpe case, to responsibly reduce assessed costs to the two companies. .

credibility on rate of return issues should cause this Commission to carefully scrutinize the merit of this Exhibit and Mr. Meredith's related testimony.

Q. MR. MEREDITH STATES AT LINE 374 THAT YOU "FAIL TO INDICATE THE METHOD USED TO CALCULATE THE PROPOSED STAFF RETURNS ON EQUITY IN KANSAS". IS THIS CRITICISM WARRANTED OR REASONABLE?

A. No. At line 264 of my Direct Testimony I indicate that the DCF and CAPM methods are used. Also as indicated above, all the filings, pleadings, testimonies, stipulations and orders are publicly available on the KCC website. Review of each publicly available KCC staff testimony on rate of return will show that each case contains a "comprehensive updated cost of equity analysis"[6] and that the comprehensive analysis performed includes <u>both</u> Discounted Cash Flow (DCF) and Capital Asset Pricing Model (CAPM) estimations which are used to create a holistic return on equity recommendation to the Commission.

Q. MR. MEREDITH APPEARS TO IGNORE USE OF THE DISCOUNTED CASH FLOW METHOD OF DETERMINING RETURN ON EQUITY, AND FOCUSES ONLY ON THE CAPITAL ASSET PRICING MODEL (CAPM). IS

---

[6] Exhibit OCS 2S-1; LaHarpe Order; at page 7.

THIS A SIGNIFICANT SHORTCOMING IN HIS TESTIMONY AND PRESENTATION?

A. Yes. Mr. Meredith's testimony contains no discounted cash flow analysis for determining return on equity, or reference to such analysis. Further, there is no explanation of why Mr. Meredith has excluded the DCF methodology from his testimony. My experience is that return on equity analysis before state utility commissions will include estimations using both the DCF and CAPM methodologies. This is done for purposes of producing a robust analysis, which has an inherent cross-check between the methods to ensure reasonableness. Notably, the return on equity estimations contained in the table in my Direct Testimony at line 252 are derived from averages of the estimations from application of both the DCF and CAPM methodologies. There is thus an inherent cross check for reasonableness in my recommendation that is lacking in Mr. Meredith's testimony.

Q. AT LINE 114 MR. MEREDITH STATES "A SMALL COMPANY ADJUSTMENT OR MORE SPECIFICALLY A SIZE ADJUSTMENT IS A COMMON ADJUSTMENT THAT IS USED WHEN EXAMING SMALL COMPANIES". HAS MR. MEREDITH PROVIDED ANY CITATIONS WHERE THIS ADJUSTMENT WHICH HE CLAIMS IS "COMMON" HAS BEEN ACCEPTED BY A STATE COMMISSION?

A. No. Mr. Meredith provides no evidence of the acceptance of a small company adjustment in any state USF funding proceeding, or in any other proceeding where determination of rate of return is required. I am not aware of any case where a state commission has accepted and used a "small company adjustment" in its rate of return findings for state USF funding. Mr. Meredith's testimony contains generalizations and assertions on the subject of the "small size" adjustment, but no real specifics on how "size" is measured, or where are the breakpoints between "small size" and larger size. Perhaps it may be presumed that size is measured by the firm's level of capitalization. In any event, the proffered small size adjustment is completely contrary to rate of return estimation concepts in public utility proceedings before state utility commissions. Furthermore, the bare existence of a "small company premium" is disputed in the finance field, and there is strong evidence that such a premium does not in fact exist.

Q. HOW IS THE USE OR INCLUSION OF A "SMALL COMPANY PREMIUM" CONTRARY TO STANDARD PRACTICES FOR DETERMINATIONS OF REQUIRED RETURN ON EQUITY IN STATE COMMISSION PROCEEDINGS?

A. State utility commissions typically rely on two methods for estimating the required return on equity: the Discounted Cash Flow (DCF) and Capital Asset

Pricing Model (CAPM) methods. DCF is universally used in state rate case proceedings, and is the standard tool for rate of return on equity estimation and valuation of assets of all types. CAPM is also often used in regulatory cases and is a standard tool in modern portfolio theory for risk/return evaluation. The DCF estimates the investor's required rate of return using dividend yield of comparable companies and the growth rate in earnings and dividends expected by investors. Dividend yield is based on public market data of dividends divided by the market price of the common stock. The market price of the common stock incorporates the market's assessment of the risks facing the enterprise. The higher the perceived risk, the lower the market price (all else equal), and the greater the dividend yield to compensate investors for the higher perceived risk. By definition, the market assessment of risk incorporated in the dividend yield is comprehensive, and includes and accommodates all risk factors.

Again, addition of a further amount as a purportedly necessary "small company adjustment" on top of this already comprehensive estimation based on market assessment of risk is double-counting, and serves only to provide additional and unwarranted funds to the particular company, taken from Utah consumers statewide.

Similarly, CAPM expresses the relationship between risk and rate of return required by investors – the higher the risk, the higher the required rate of return. CAPM is also based on market data: the return on the "risk free" security or "Rf" (often Treasury Bonds are used as a proxy for this); the expected future return of the stock market or "Rm"; and "beta" which is a statistic that relates the volatility of the stock's return to the volatility in the market's return. By definition, the market assessment of risks is included and incorporated in these measures. Again, addition of a further amount as a purportedly necessary "small company adjustment" on top of this already comprehensive estimation based on market assessment of risk is double-counting, and serves only to provide additional and unwarranted funds to the particular company, taken from Utah consumers statewide.

Q. IN CONCERT WITH THIS FUNDAMENTAL PROBLEM OF DOUBLE COUNTING OF RISK, IS IT REASONABLE NOT TO ACCOUNT FOR, RECOGNIZE OR SUBTRACT <u>REWARDS</u> THAT ARE ASSOCIATED WITH A COMPANY'S POSITION?

A. No. It is fundamentally unfair and unreasonable to provide an "adder" for purported unrecognized risk without also recognizing <u>offsetting benefits</u> of a company's position. A partial listing of these offsetting benefits would include advantages of incumbency in a defined service area which go back to the company's formation; access to low cost subsidized debt financing through the RUS and cooperatively-owned banks such as CoBank which also provide low cost subsidized debt financing; access through these relationships to debt financing without further loan application, with just a phone call; access to federal and state universal service funds which many larger companies do not have; access to equity via accumulation of profits as capital credits which are retained by the company; ability to recover increased costs through increased rates as a regulated utility (which a firm in an unregulated industry cannot do); and advantages of access to businesses and profits of related entities as illustrated by the following Table 1, from Emery's 2014 audited operating results[7] for each of Emery's entities, most of which are non-regulated:

[**BEGIN CONFIDENTIAL**]

Entity	Net Operating Revenue	Total Operating Expenses	Operating Margins	Operating Margin %
Emery Telcom	[redacted]	[redacted]	[redacted]	[redacted]
Carbon/Emery Telcom	[redacted]	[redacted]	[redacted]	[redacted]
Hanksville Telcom	[redacted]	[redacted]	[redacted]	[redacted]
Emery Telcom & Video	[redacted]	[redacted]	[redacted]	[redacted]
Emery Telcom Long Distance	[redacted]	[redacted]	[redacted]	[redacted]
Emery Telcom Video LLC	[redacted]	[redacted]	[redacted]	[redacted]

[7] Confidential Exhibit 14 to Supplemental Direct Testimony of Darren Woolsey.

[END CONFIDENTIAL]

The Commission should not consider granting a “small company premium” for purported risks, without offsetting for the substantial small company benefits that accrue. Ultimately, the market estimations of risk incorporated in the DCF and CAPM methods addresses all risks and benefits, and it is therefore a fruitless, duplicative and unnecessary exercise to seek to account for risks and offsetting benefits.

Q. WHAT IS THE EVIDENCE IN THE FINANCE FIELD WHICH DISPUTES THE EXISTENCE OF A “SMALL COMPANY PREMIUM”?

A. The proposition that a “small company premium” exists depends on a belief that markets are inefficient rather than efficient. The existence of efficient markets is a key component of both the DCF and CAPM methods, as well as modern portfolio theory. Both methods use market data from efficient markets to estimate required return on equity on a risk adjusted basis. Proponents of a “small company premium” are in essence stating that financial markets are not efficient, and do not properly adjust prices to reflect risks, and that therefore a premium must be added to required rates of return estimated using market data. Efficient markets are created by the rapid and continuous flow of new information by which any momentary market imperfections are rapidly arbitraged away to an efficient market price, and there is no profit to be made based on trading on a price which is "wrong". Inefficient markets suggest in contrast that the market price is "wrong" and traders can profit and capitalize on the existence of prices which are "wrong". The existence of a "small company premium" implies that investors can craft a trading strategy that capitalizes on this market imperfection, and make pure profit over and above that which is indicated by the risk (excess risk adjusted rates of return). An article by Professor Burton Malkiel (author of A Random Walk Down Wall Street) describes the experience of a portfolio manager that has tried to capitalize on these purported market imperfections – prices which are "wrong" – the portfolio manager "failed to make a nickel". This leads to the conclusion that if professional investors cannot replicate or exploit market imperfections for profit, the market imperfection likely does not exist. As stated by Professor Malkiel:

> Many of the predictable patterns that have been discovered may simply be the result of data mining. The case of experimenting with financial databanks of almost every conceivable dimension makes it quite likely that investigators will find some seemingly significant but wholly spurious correlation between financial variables or among financial and nonfinancial data sets. Given enough time and massaging of data series, it is possible to tease almost any pattern out of most data sets. Moreover, the published literature is likely to be biased in favor of reporting such results. Significant effects are likely to be published in professional journals while negative results, or boring confirmations of previous findings, are relegated to the file drawer or discarded. Data-mining problems are unique to non-experimental sciences, such as economics, which rely on statistical analysis for their insights and cannot test hypotheses by running repeated controlled experiments.
>
> An exchange at a symposium about a decade ago between Robert Shiller, an economist who is sympathetic to the argument that stock prices are

partially predictable and skeptical about market efficiency, and Richard Roll, an academic financial economist who also is a portfolio manager, is quite revealing (Roll and Shiller, I 992). After Shiller stressed the importance of inefficiencies in the pricing of stocks, Roll responded as follows:

> I have personally tried to invest money, my client's money and my own, in every single anomaly and predictive device that academics have dreamed up …. I have attempted to exploit the so-called year-end anomalies and a whole variety of strategies supposedly documented by academic research. And I have yet to make a nickel on any of these supposed market inefficiencies … a true market inefficiency ought to be an exploitable opportunity. If there's nothing investors can exploit in a systematic way, time in and time out, then it's very hard to say that information is not being properly incorporated into stock prices.[8]

Academic research has found that the data upon which the "small company premium" rests does not accurately measure past returns of NASDAQ (small capitalization) stocks, and it is questionable whether such "small company premium" ever existed.[9] In essence the negative impact of delisting a stock has been under-included in the reported returns for the small-cap companies. Delisting of a stock occurs much more often with smaller capitalization companies than larger capitalization companies, therefore the delisting bias would inflate the apparent historic returns of the small capitalization companies.

---

[8] *The Efficient Market Hypothesis and Its Critics*; Burton G. Malkiel; Journal of Economic Perspectives; Volume 17, Number 1, Winter 2003; pp 59-82. The Journal of Economic Perspectives is provided and supported by the American Economic Association, and publishes invited contributions.

[9] *The Delisting Bias in CRSP's NASDAQ data and Its Implications for the Size Effect*; Tyler Shumway and Vincent Warther; The Journal of Finance, vol. LIV, No. 6; December 1999, pp 2361 – 2379. The Journal of Finance is a refereed journal.

Further, researchers have found that the high returns of the small capitalization group of stocks are driven by a very small fraction of that population.[10] Large companies perform better than all but a very few small capitalization companies that earned very high returns. This would also inappropriately bias upward or even suggest the bare existence of any purported "small company premium".

Q. AT LINE 92 MR. MEREDITH DEFINES "A SMALL COMPANY PREMIUM [AS] AN ADJUSTMENT TO THE CALCULATED RATE OF EQUITY [SIC] AND IS DESIGNED TO ACCOUNT FOR THE FACT THAT ACCESS TO EQUITY IS MORE CONSTRAINED AS COMPANIES GET SMALLER. THUS, DUE TO VARIOUS FACTORS, ACCESS TO CAPITAL REQUIRES A PREMIUM OVER A RETURN ON EQUITY FOR MUCH LARGER COMPANIES." PLEASE RESPOND.

A. Mr. Meredith provides no evidence whatsoever that Carbon/Emery's access to capital is at all constrained. In fact, Carbon/Emery's equity has grown substantially enough to permit paying off all debt, and to continue rapid accumulation of profits and capital credits, all while it is financing a substantial construction program for Fiber to the Home. As shown by Table 1, above, these profits are accumulating in Emery's non-regulated affiliates. This is hardly the

---

[10] *On the Robustness of Size and Book-to-Market in Cross-Sectional Regressions*; Peter J. Knez and Mark J. Ready; The Journal of Finance; vol. LII, No. 4, September 1997; pp 1355 – 1382. The Journal of Finance is a refereed journal.

profile of an entity that is “capital constrained”. The purported need for a “premium” would be pure profit subsidy from ratepayers statewide to Emery’s patrons.

Q. AT LINE 299, MR. MEREDITH STATES “CARBON/EMERY IS CHALLENGED IN THE EQUITY MARKETS”. DOES MR. MEREDITH PROVIDE ANY SUPPORT FOR THIS CONTENTION?

A. Mr. Meredith provides no evidence whatsoever that Carbon/Emery is challenged in the equity markets. Further undermining Mr. Meredith’s claims is the fact that Carbon/Emery does not participate in public equity markets. It therefore is unclear what “equity market” Mr. Meredith is referring to. The nature of the “challenge” is not described by Mr. Meredith and the nature of any such “challenge” is very difficult to perceive when Carbon/Emery has accumulated substantial capital credit balances, and has paid off all debt such that it is 100% equity-funded at this point. It begs the question of how much more equity does Carbon/Emery need when it has substantial member-provided equity, and is internally funding a substantial Fiber to the Home construction program while continuing to accumulate substantial capital credits (equity) for its members.

Q. AT LINE 193 MR. MEREDITH REFERENCES A RURAL BROADBAND ALLIANCE ESTIMATE OF 6 PERCENT FOR A "SMALL COMPANY ADJUSTMENT". IS SUCH AN ADJUSTMENT WARRANTED?

A. No. This "estimate" is drawn from Mr. Meredith's Exhibit 4, which the cover page indicates are comments before the FCC authored by Mr. Vincent Wiemer. This is the same Mr. Wiemer that the Kansas Corporation Commission found had no credibility as a rate of return expert in the LaHarpe case. Also, the very size of the suggested "premium" indicates its inappropriateness. It is egregious to recommend that 6% be added on top of any return on equity determined by DCF or CAPM using market data which by definition includes a market assessed risk/return relationship.

Q. DOES THE CAPITAL ASSET PRICING MODEL (CAPM) AND MODERN PORTFOLIO THEORY SUPPORT USE OF A "SMALL COMPANY PREMIUM"?

A. No, the use of a "small company premium" clearly conflicts with CAPM and modern portfolio theory. Application of the "small company premium" at best represents an attempt to be compensated for "unsystematic risk" which has very specific meaning in capital markets theory. The market only compensates for "systematic risk" because "unsystematic risk" is diversified away by the prudent investor. The difference and importance of distinguishing between systematic and unsystematic risks is described as follows:

> The total risk involved in holding a stock is comprised of two parts: the systematic component and the unsystematic component. The first is due to overall market risk and cannot be diversified away. The second risk component, however, is unique to the particular company, being independent of economic, political and other factors that affect securities in a systematic manner. By diversification, this risk can be reduced and even eliminated if diversification is efficient. Therefore, not all of the risk involved in holding a stock is relevant; part of it can be diversified away. …. Efficient diversification reduces the total risk of the portfolio to the point where only systematic risk remains. …. the important risk of a security is the responsiveness of its return to changes in the return on the market portfolio, as denoted by its beta. …. For the individual security, then, the relevant risk is not the standard deviation of the security itself (total risk), but the marginal effect the security has on the standard deviation of an efficiently diversified portfolio (systematic risk). As a result, <u>a security's expected return should be related to its degree of systematic risk, not to its degree of total risk</u>.[11]

Q. AT LINE 311 MR. MEREDITH INDICATES "ADJUSTING THE BETA" IS "ANOTHER STANDARD TOOL". IS THIS IN FACT "STANDARD" IN DETERMINATION OF RETURN ON EQUITY BEFORE STATE UTILITY COMMISSIONS?

A. This is an unsupported assertion by Mr. Meredith. He offers no citation to state commission decisions that have adopted this "standard" adjustment, including to decisions of the Utah PSC. I am unaware of any Commission decision in any jurisdiction where this "standard" adjustment is applied in determination of

---

[11] Financial Management and Policy, James C. Van Horne, Fourth Edition, Prentice-Hall, Inc., 1977, pp.61 – 63 (<u>emphasis added</u>).

return on equity. The Commission should not accept Mr. Meredith's unsupported assertion.

Q. BEGINNING AT LINE 319 OF HIS TESTIMONY MR. MEREDITH PROPOSES THE USE OF A "LEVERED BETA" TO CALCULATE REQUIRED RETURN ON EQUITY. DOES MR. MEREDITH PROVIDE ANY SUPPORT FOR THE USE OF "LEVERED BETA" IN CALCULATING RETURN ON EQUITY IN A REGULATORY PROCEEDING?

A. No. Mr. Meredith provides no citation to any regulatory proceeding where a commission has used "levered beta" to calculate a required or allowed return on equity. I am not aware of any instance where a state utility commission has accepted or used "levered beta" in its determinations on rate of return. This is not surprising since to my knowledge "levered beta" is not used in valuation settings like estimating rate of return. I have reviewed the various finance and investment texts in my possession[12] and while there are very substantial chapters on CAPM, beta, and related concepts and practices, there is no mention whatsoever of "levered beta" or any equivalent. The standard usage of "levered beta" I believe is for capital budgeting decisions – i.e., whether to undertake a specific capital project, or not – not for valuation estimations such as rate of

[12] These include: Managerial Finance, J. Fred Weston and Eugene F. Brigham; Financial Management and Policy, James C. Van Horne; Investments, Frank K. Reilly; Managing Investment Portfolios: A Dynamic Process, John L. Maginn and Donald L. Tuttle, eds.

return. The Commission should disregard Mr. Meredith's "levered beta" discussion and calculations for these reasons.

Q. AT LINE 383 MR. MEREDITH REFERS TO A NEW NTCA-SPONSORED RATE OF RETURN METHOD. SHOULD THE COMMISSION GIVE ANY WEIGHT TO THIS TESTIMONY?

A. No. Mr. Meredith does not provide any citation to where this new methodology has been used and vetted. Furthermore, the new method requires a substantial new variable – "value" – which by its nature is bound to be controversial. There will be competing estimations of "value" and it does not simplify or streamline the rate of return determination process to add a controversial new variable that must be calculated.

Q. AT LINE 342 OF MR. MEREDITH'S TESTIMONY HE PRESENTS A GRAPH DRAWN FROM AN ARTICLE IN THE INVESTMENT MANAGEMENT REVIEW, AND CLAIMS THAT THE GRAPH "SHOWS THE VARIOUS PREMIA REQUIRED TO CALCULATE RETURNS ACROSS FINANCIAL INSTRUMENTS". IS MR. MEREDITH CORRECT IN THIS INTERPRETATION OF THE GRAPH?

A. No. Mr. Meredith's statement fundamentally misunderstands the import of the graph. It is not possible to fully assess this graph since the title of the graph is not provided, nor is the article from which it is drawn attached as an exhibit. It appears to me that the graph is not meant to indicate "various premia" that must be added to some base return to calculate a required rate of return, but to explain what composes a required rate of return from one perspective. The standard formulation of the required rate of return is a "required rate of return on an investment is determined by: 1) the economy's real risk-free rate of return plus 2) the expected rate of inflation during the holding period, plus 3) a risk premium."[13] Furthermore, Mr. Meredith is not consistent in that he states that "they [the various premia] are required to calculate a rate of return" but he does not provide a rate of return estimation which estimates and sums each of these "various premia". The Commission should give no weight to this graph because it is not tied to a real calculation of required return on equity. Instead, the Commission should rely upon required return on equity estimations that are clearly based upon the standard formulation of the real risk free rate of return plus expected inflation plus the risk premium – DCF and CAPM.

Q. WOULD COMMISSION ACCEPTANCE OF THE USE OF A "SIZE PREMIUM" OR "SMALL COMPANY ADJUSTMENT" IN THIS CASE ENCOURAGE OTHER JURISDICTIONAL UTILITIES SUCH AS GAS AND

---

[13] Investments, Frank K. Reilly, The Dryden Press, 1982, at page 191.

ELECTRIC COMPANIES TO ADVOCATE ITS USE TO INCREASE THEIR AUTHORIZED RETURN ON EQUITY?

A. Yes, I believe it could. For example, in spite of the fact that the Kansas Corporation Commission has not accepted use of a “small company premium” each time it has been advocated by local exchange companies in KUSF audit proceedings, the largest electric utility in Kansas – Westar Energy – has a rate increase request pending where it has referenced the necessity of adjusting the DCF and CAPM results for “small” company size.[14] If the Utah Commission accepts Carbon/Emery’s request to employ a “small company” or “size” adjustment to the CAPM results, I believe it would be likely that other jurisdictional utilities in Utah would also request additional premiums on top of the cost of equity results indicated by DCF and CAPM. I believe this would be an egregious error because (as discussed above) by definition the CAPM methodology is designed to capture and compensate for market-based systematic risk of equity investments. By definition the CAPM estimation is risk adjusted, and it would be inappropriate double-recovery to include

[14] In the Matter of the Application of Westar Energy, Inc. and Kansas Gas and Electric Company to Make Certain Changes in Their Charges for Electric Service; Docket No. 15 – WSEE – 115 – RTS; Direct Testimony of Tony Somma on behalf of Westar Energy, at page 27. This Direct Testimony is publicly available on the KCC website at www.kcc.state.ks.us

additional premium on top of that estimation. The DCF method is also based on market data and estimations designed to capture and recognize all risks.

Q. PLEASE SUMMARIZE HOW AND WHY MR. MEREDITH'S TESTIMONY CONTRADICTS WELL ACCEPTED PRINCIPLES OF FINANCE AND THEREFORE YIELDS RATE OF RETURN ESTIMATIONS WHICH ARE ESSENTIALLY MEANINGLESS AND WITHOUT PROPER FOUNDATION.

A. Mr. Meredith's testimony obfuscates basic principles of finance and rate of return determination in regulatory cases, and is otherwise internally inconsistent. The Commission should find that a return on equity and overall rate of return of the magnitude sought by Carbon/Emery is unwarranted and unnecessary in today's capital markets, and is imbalanced against the wireline and wireless services consumers that pay into the UUSF to provide funds for individual local exchange companies like Carbon/Emery. Carbon/Emery's original requested return on equity is 12.13%, and a requested overall rate of return of 10.50%. Mr. Meredith offers a variety of recommendations, including that "the rate of return for Carbon/Emery should be higher than the proposed 10.50 percent" (line 166); "the median value [for the NECA calculated rate of return] was at least 11.75 percent" (line 388); "a 16.83 percent intrastate cost of equity yields an adjusted weighted average cost of capital of 12.34 percent" (line 322) which cost of equity "account[s] for a conservative size premium" (line 368). Mr. Meredith's potpourri is disconnected from the standard methods of rate of return analysis used by state utility commissions – Discounted Cash Flow (DCF) and Capital Asset Pricing Model (CAPM) – and violates fundamental principles in finance by which risk and return are related, and under which investors are compensated <u>only</u> for systematic risk as calculated in the "beta" associated with each security. Mr. Meredith's testimony begs the question of what does he believe specifically is an appropriate rate of return, and lends itself to an interpretation such "specific" rate of return would <u>simply be the highest return</u> the Commission can be persuaded to accept.

Mr. Meredith's disconnection from standard methods of rate of return analysis used by state utility commissions is illustrated by his testimony which:

- Without serious explanation or consideration discards use of DCF, which is <u>the</u> fundamental method for asset valuation;
- Provides no evidence whatsoever that the company's access to equity or capital is at all constrained;
- Advocates use of "levered beta", which is not used or recognized for rate of return analysis by state utility commissions, and is instead oriented toward internal capital budgeting decisions of firms;

- Advocates use of "various premia" layered on top of determined rate of returns, which premia are not used or recognized for rate of return analysis by state utility commissions;
- Advocates use of "various premia", the very existence of which is inconsistent with efficient markets principles of finance and capital markets, and whose existence would necessarily imply profitable exploitable investment strategies – using which professional investors have "yet to make a nickel";
- Advocates use of "various premia" as an additive to reflect purported additional risks, without consideration of substantial offsetting additional benefits which pertain to incumbent local exchange companies;
- Advocates use of "various premia", which researchers have found may very well not exist, whose apparent existence may be the result of "data mining", which may be indicative of correlation but not causation, and may ultimately stem from "survivor" bias in the small company database as well as being driven by a very small fraction of outliers in the data;
- Advocates use of "various premia", which is entirely inconsistent with modern portfolio theory under which investors are compensated only for systematic risk (expressed via the "beta") within an efficient portfolio, but not for unsystematic risk; and,

- Contains inappropriate and unfounded speculation and conjecture regarding why the FCC may or may not have acted on its staff report.

The Commission should adopt the overall rate of return of 8.45% based on a 10% return on equity which is recommended in my Direct Testimony. This recommendation has a demonstrable, solid foundation in regulatory practices for rate of return determination, and finance theory and practices. This recommendation reflects a proper balance for those Utah statewide consumers that pay monthly charges through their wireless and wireline services provider bills to fund the UUSF, and those individual incumbent companies that seek to draw from the UUSF. Finally, this recommendation is very consistent with rates of return on equity recently granted by the Commission.

Q. DOES THIS COMPLETE YOUR PREFILED SURREBUTTAL TESTIMONY?

A. Yes.