- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

In the Matter of Carbon/Emery Telecom Inc.'s Application for an Increase in Utah Universal Service Fund Support	)))))))	DOCKET NO. 15-2302-01 DPU Exhibit 3.0 SR Surrebuttal Testimony of Casey J. Coleman

DIVISION OF PUBLIC UTILITIES
DEPARTMENT OF COMMERCE

September 18, 2015

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I. IDENTIFICATION OF WITNESS

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

A. My name is Casey J. Coleman. I am employed by the Division of Public Utilities ("Division") for the State of Utah. My business address is 160 East 300 South Salt Lake City, UT 84114.

Q. HAVE YOU PREVIOUSLY FILED DIRECT TESTIMONY IN THIS MATTER?

A. Yes.

Q. DESCRIBE THE PURPOSE OF YOUR TESTIMONY.

A. The purpose of my testimony is to address a variety of issues discussed in rebuttal testimonies provided by the Office of Consumer Services ("OCS") and Carbon/Emery Telecom, Inc. ("Carbon"). In the rebuttal testimony of Mr. David Brevitz, OCS and Mr. Douglas Duncan Meredith, Carbon, they argue why the proposed methodology and inputs calculated by the Division of Public Utilities ("DPU") should be modified or rejected. My Surrebuttal testimony will clarify the inputs used by the DPU and why the Public Service Commission of Utah ("Commission") should accept the DPU's recommendations.

II. INTERSTATE RATE OF RETURN

Q. ARE THERE ANY CHANGES OR MODIFICATIONS YOU WOULD LIKE TO MAKE REGARDING YOUR PREFILED DIRECT TESTIMONY?

A. Yes.

Q. WHAT MODIFICATION ARE YOU MAKING TO YOUR PREFILED TESTIMONY?

A. At line 119 of my direct testimony I state the "correct interstate rate to use when calculating the allowed rate of return is 9.40%, which blends the Common Line, Switched Traffic Sensitive and Special Access pools." After further research, discussions with Carbon, and employees at National Exchange Carrier Association, Inc. ("NECA") the Division has learned the correct interstate rate earned by Carbon is the 11.45%.

Q. WILL YOU EXPLAIN WHY THE DIVISION IS RECOMMENDING USING THE INTERSTATE RATE OF 11.45 PERCENT?

A. Yes. The original recommendation in my direct testimony was based on a faulty understanding that Emery Telecom, Carbon, and Hanksville Telecommunications participated in the NECA pools as separate entities and therefore would have the potential for different interstate rates. However, Mr. Woolsey has since explained that NECA treats all three companies as one "entity" and the rates are for a study area not for one specific company.

Additionally, as the National Exchange Carrier Association, Inc.'s Tariff F.C.C. 5, which I have included as Exhibit DPU SR 3.2, shows, the only entity NECA has record information for is Emery Telephone Company d/b/a Emery Telecom.

My earlier recommendation of using an interstate rate of 9.40% for Carbon was based on the belief that Emery Telecom was the only company in Utah that was not participating in all three of the NECA pools, i.e. Interstate, Common Line and Special Access. Because my belief that Emery Telecom was the only Common Line pool company and therefore the only company that should use an applicable interstate rate from the first form 492A. This misguided premise led to the faulty recommendation of using an interstate rate of 9.40% for Carbon.

Q. CAN YOU EXPLAIN A BIT MORE WHY IT MATTERS IF A COMPANY IS PARTICIPATING IN ALL THE NECA POOLS OR JUST COMMON LINE?

A. Yes. The importance of this point lies in the fact that NECA produces two 492A forms. One form has the information for companies that are exclusively participating in Common Line only. The first form 492A shows an interstate rate of return for those companies of 11.45%. The second form 492A shows an interstate rate of return for NECA companies that are participating in

Common Line, Special Access, and Interstate rate pools. The reality is that because NECA allows companies to choose which pools they want to participate in and receive the applicable cost recovery, there are two different forms, but only **ONE** form is applicable to a certain study area. For Carbon the appropriate form 492A that shows the earned interstate rate is the Common Line form or the first form in OCS Exhibit 2D-2. If every company that is part of NECA participated in Common Line only, then there would only be one form, the form 492A that states the rate of return of 11.45%. There would be no "blending of the rates" because all the companies would be earning 11.45%. Conversely, if all companies participated in all three pools, there would only be the second form 492A which shows the blending of the rate and the 9.40% for interstate.

Q. WILL YOU DISCUSS HOW FORM 492A IS APPLICABLE TO UTAH ADMIN. CODE § R746-360-8 (A) (1)?

A. Yes. For ease of discussion I have included Utah Admin. Code § R746-360-8 (A) (1) below:

R746-360-8. Calculation of Fund Distributions in Rate-of-Return Incumbent Telephone Corporation Territories.

(A) Determination of Support Amounts --

(1) Incumbent telephone corporation - Monies from the fund will equal the numerical difference between the Incumbent telephone corporation's total embedded costs of providing public telecommunications services, for a designated support area, less the product of the Incumbent telephone corporation's Average Revenue Per Line, for the

designated support area, times the Incumbent telephone corporation's active access lines in the designated support area. To the extent the Commission finds that inclusion of any cost will result in an inefficient use of USF funds or in a use of USF funds that is inconsistent with the public interest, such cost will be excluded from total embedded costs. Total embedded costs shall include a weighted average rate of return on capital of the intrastate and interstate jurisdictions. For example, in the case of an Incumbent telephone corporation whose costs are allocated fifty percent to each jurisdiction and whose interstate return is 11.25 percent and whose intrastate return authorized by the Commission is 9 percent, the weighted average return on capital would be 10.125 percent.

(a) In order to determine the interstate return on capital to calculate the weighted average rate of return on capital for Incumbent telephone corporations, the Commission shall:

(i) use the prior year return reported by the National Exchange Carriers Association (NECA) to the Federal Communications Commission (FCC) on FCC Form 492 for Incumbent telephone corporations that do separations between intrastate and interstate jurisdictions under 47 CFR Part 36. In the event that the Incumbent local telephone corporation uses a future test period as provided in Utah Code Ann. Subsection 54-4-4(3)(b)(i), the interstate return for these Incumbent telephone corporations shall be the average of the actual return for the prior three years as reported on FCC Form 492.

As the above rule states, parties who want to determine the interstate rate of return on capital must use NECA Form 492. It would seem that the rule's intent is to use the rate of return that is earned by the Incumbent telephone corporations, i.e. Carbon, in the NECA pools and not some blended rate that does not apply to that specific company.

Q. IS THERE ANOTHER WAY TO VERIFY THAT CARBON IS PARTICIPATING EXCLUSIVELY IN THE COMMON LINE POOLS?

A. Yes. . If you look at the NECA Tariff F.C.C No. 5, which I included as Exhibit DPU SR 3.2, a quick analysis of this rate table lists a variety of different columns labeled State, Study Area Number, MLB EUCL, SPA, ETS, LS, LT, and TST. Other than State and Study Area, the remaining columns are

showing the applicable rate bands for each NECA pool participant. Searching specifically for Emery Telecom you can see the company specific information listing the number 15 under MLB EUCL, and the remaining columns show N/A. As this tariff shows, Emery and all the companies in the same Study Area are only participating in the Common Line Pools. This tariff shows that the applicable form 492A to use for Carbon is the one that has only Common Line elements and not a blending of all the pools. Carbon participates only in the Common Line Pool.

Q. DO YOU AGREE WITH MR. BREVITZ'S INTREPRETATION OF COMMISSION RULE R746-360-8?

A. No. Mr. Brevitz makes a detailed argument how the interstate rate of return must be a blended rate. The Division agrees that there is a weighted calculation that must happen to determine the appropriate cost recovery for Carbon, but the weighting the rule suggests is with the interstate and intrastate rate according to specific company separations between interstate and intrastate. The rule does not require the interstate rate to be "blended" or a weighted average between Special Access, Common Line, and Interstate. Instead it seems like the rule contemplates one "data point" from the form 492A that will be used for the interstate rate. Mr. Brevitz and I will disagree about which form should be used and as a result which interstate rate is appropriate, but I believe the Commission rule clearly requires the interstate

rate is the rate "earned" by the company. Carbon has earned 11.45% on their interstate Common Line assets; therefore, that earned rate must be used according to rule.

Q. IN LINES 84-93 IN MR. BREVITZ'S REBUTTAL TESTIMONY HE DISCUSSES AN INCONSISTENCY IN USING THE COMMON LINE ONLY INTERSTATE RATE. DO YOU AGREE USING THIS RATE COULD CREATE AN INCONSISTENCY?

A. Yes. While the intent of the Commission's rule seems clear to use the interstate rate from 492A there is a potential pitfall. As Mr. Brevitz argued in his testimony, Carbon has special and switched access in addition to common line services. Because Carbon earns a rate of return only on its Common Line from NECA there is no way to determine what the "earned" rate of return is for Carbon on their special and switched access services. This creates a situation where the bulk of the interstate earned rate is unknown. If the intent of the Commission rule is to allow Carbon to get cost recovery on its interstate facilities at the rate that is "earned", allowing Carbon to earn the 11.45% on all their interstate assets creates an inconsistency. As with any unknown it is certainly possible that Carbon is earning higher than 11.45%, but it is also just as likely and more realistic that Carbon is earning less than the 11.45%. If Carbon is earning less than the 11.45% on switched and special access services there is an arbitrage

possibility that would cause the State USF to provide revenues at an allowed a rate of return that is higher than what Carbon is earning.

Q. HOW WOULD YOU SUGGEST THE COMMISSION DEAL WITH THIS INCONSISTENCY?

A. I don't believe the rule allows for the Commission to use anything other than the interstate rate on form 492A, but if the Commission wanted to adjust for this potential arbitrage situation there are a couple of viable options. The first would be to have the rural phone companies provide the actual "earned" return on their special and switched access. The calculated rates could be used to develop a weighted average interstate rate. The other option the Commission could consider would be to calculate what portion of the interstate rate base is specific to common line. That portion of the interstate rate base could be calculated at the rate given on form 492A from NECA. The remaining rate base would receive the cost of equity that is applicable to intrastate rates. For illustrative purposes, let's assume a company had allocated 55 percent to intrastate and 45 percent to interstate. When breaking out the portion of the interstate allocation, 72 percent is Common Line and the remaining 28 percent is to switched and special access. To adjust for the potential gap discussed above the Commission would use a factor of .324 for the interstate portion. (.72 * .45). The remaining rate base would be assessed at the .676 factor. This would lower the interstate portion

to more accurately reflect a lower rate of return that companies are earning on special and switched access.

III. CAPITAL ASSET PRICING MODEL

Q. DO YOU BELIEVE THE DPU FOLLOWED THE CORRECT METHODOLGY TO DETERMINE THE COST OF CAPITAL FOR CARBON?

A. Yes.

Q. BY USING THE CAPM AND HYPOTHETICAL CAPITAL STRUCTURE THE DIVISION HAS CALCULATED A FAIR AND REASONABLE RATE?

A. Yes. In Docket No. 08-046-01 the Commission had many of the similar issues and arguments as are being argued here. In reviewing the details of Manti Telecom and Carbon I find nothing vastly different between those two companies that would warrant using a different methodology in this case. In the confidential report and order issued by the Commission on December 28, 2012 on page 21 the Commission states as follows:

> "Considering the evidence presented regarding a reasonable return on equity, i.e., the Division's use of the capital asset pricing model, the Commission is persuaded the Division's analysis produces a fair and

reasonable result. We [the Commission} therefore approve the Division's recommended rate of return on equity."[1]

Because the Commission has already found that the Division's method produces fair and reasonable results, the Division believes using a CAPM model and hypothetical capital structure in this case would produce the similar results; fair and reasonable results.

The Commission should reject Mr. Meredith suggestion to reject the CAPM unless there are adjustments to the textbook approach of calculating the cost of equity. The Commission has spoken quite clearly that a textbook approach to calculating CAPM without modifications for size, liquidity, and leveraged betas produces fair and reasonable results.

The issues Mr. Meredith discusses are the same issues the Commission considered in the Manti case. Because all of those issues were recently considered the Commission should not re-evaluate its recent decisions without evidence that Carbon is vastly different than Manti or markets are vastly different than they were then.

[1] Even though this docket was confidential, the Division does not believe the above statement by the Commission is confidential. As a result we included the statement in the public version of the testimony.

Q. MR MEREDITH USES YOUR ENDORSEMENT OF CAPM AS BEING LUKEWARM AS SOME JUSTIFICATION FOR MODIFYING THE CAPM CALCULATION. WILL YOU EXPLAIN YOUR REASONING FOR BEING LUKEWARM ABOUT CAPM?

A. Yes. As Mr. Meredith explained in his rebuttal testimony there are some potential pitfalls in using a text book or simple CAPM. I agree that there are some challenges with using CAPM. But as I discussed before in my direct testimony, with a small rural phone company it is virtually impossible to use any other method, such as a modified discounted cash flow, comparable companies, etc. There is almost no publicly available information to determine a rate of return that produces reasonable results. This stark fact is one germane element of my reluctance to enthusiastically recommend the CAPM method.

Despite the difficulties and challenges in using CAPM as discussed above there are more basic and significant reasons my comfort level in using a CAPM is only lukewarm. My biggest concern and lack of full endorsement for the model is the fact that the model is based on portfolio theory instead of one single stock.

A multitude of assumptions are required to obtain the CAPM. Two general assumptions overshadow the others. The first general assumption is that capital markets are competitive and efficient, with information freely

available to all investors and rapidly impounded in security prices such that security prices can be trusted to represent the best estimate of the true value of a security at a point in time. The second general assumption is that investors are rational profit-maximizers who pursue their monetary self-interests, demanding higher returns for higher risks and driving expected returns toward their levels predicted by the security mark line.

The remaining assumptions are more stringent and specialized.

1) Investors hold diversified portfolios and operate in capital markets unencumbered by transaction costs, taxes, and restrictions on borrowing and short-selling.

2) Investors possess homogeneous expectations, thereby agreeing on the likely prospects of securities over a common time horizon.

3) Investors preferences and the statistical nature of the security returns follow rigid definite patterns.

Additionally, the CAPM model depends on company-specific risk and market risk. Company-specific risk is that part of a security's risk associated with random events; it can be eliminated by proper diversification. Lawsuits, strikes, successful and unsuccessful marketing programs, and the winning or losing of major contracts are unique events to a particular firm that would

be classified as company specific risks. Market risk on the other hand, stems from factors that systemically affect most firms such as war, inflation, recessions, and high interest rates. Since most stocks will tend to be negatively affected by these factors, market risk cannot be eliminated by diversification. The fact that a large part of the riskiness of any individual stock can eliminated is vitally important in portfolio theory

Because we know that investors demand a premium for bearing risk, that is, the higher the riskiness of a security, the higher the expected return required to induce investors to buy (or to hold) it, the CAPM model tries to quantify that individual risk. Essentially, the CAPM model is trying to quantify the riskiness of an individual stock when investors are concerned with portfolio theory and assign a number that can be calculated to represent that risk. That calculated return signifies how this one individual stock's expected return will vary compared to all other stocks in a portfolio.

The core idea of CAPM is that investors can eliminate company-unique risks by appropriate diversification, and therefore should not be rewarded for bearing this superfluous risk. Diversified risk-averse investors are only exposed to market risk, and are therefore rewarded with higher expected returns for bearing only market-related risk. Beta is a measure of market

risk, and captures the extent to which a security's returns move in tandem with the returns of the overall risk.

Risk-averse investors demand higher returns for assuming additional risk, and high-risk securities are priced to yield higher than expected returns than lower risk securities. The CAPM quantifies the additional return required for bearing incremental risk, and provides a formal risk-return relationship anchored on the basic idea that only market risk matters, to portfolio investors, as measured by beta.

Q. SO WHY DOES USING A PORTFOLIO THEORY FOR CALCULATING A COST OF EQUITY FEEL LIKE FITTING A SQUARE PEG IN A ROUND HOLE WHEN LOOKING AT SMALL RURAL PHONE COMPANIES IN UTAH?

A. I am less than absolute in my support for CAPM because it uses a method that goes contrary to regulatory rate setting and the "risks" the cost of capital is trying to compensate for investors. Generally, the Commission is trying to set rates that are fair and reasonable that will allow investors to be compensated for the risk of investing in the regulated utility while allowing the regulated utility enough capital to invest in the necessary infrastructure. The Commission must determine if the capital expenditures are prudent, just and reasonable. Unfortunately, many of the financial models are developed with the premise of allowing investors a method to determine the level of risk

between one type of investment or another investment. Most of the financial models were not designed to evaluate a small rural phone company whose stocks are privately held and has a government fund to offset many of the financial and business risks encountered in the market.

Because CAPM is trying to evaluate how an individual stock will vary in certain market conditions according to a portfolio of stocks, it does not get to the nuts and bolts that really make up a small rural phone company. Because the CAPM does not really reflect the realities of doing business as a small rural phone company, it feels like the results are almost stretched to fit the circumstances. As I will discuss in further detail, as you keep adjusting the basic theory, the results keep getting stretched and twisted until it is difficult to say that the calculated rate reasonably reflects the situation of the company. To avoid this stretching, the Commission should not use the various "tools" of a liquidity premium, a small company premium, normalization of rates because of abnormal treasury rates or any other tool to modify CAPM. Such adjustments do not capture the specific realities of Carbon or small rural phone companies.

IV. ADJUSTMENTS TO CAPM

Q. WHY DO YOU THINK THAT ADJUSTMENTS TO CAPM ARE UNNECESSARY?

A. In financial theory, small company premiums, adjusting for liquidity, and other of the tools suggested make sense to consider on a macro level. No one would argue that a large multi-national corporation like AT&T or Verizon would have a harder time attracting capital than a small flower shop in Price, Utah. Additionally, because AT&T or Verizon is traded daily on the various stock exchanges, their stocks are more liquid than Alaska Communications.

The challenge with the financial models is that the assumptions are for publicly traded companies who are dealing with the same market factors and constraints. The premise in investing is that the relationship between risk and return is such that no investment will be made unless the expected rate of return is high enough to compensate the investor for the perceived risk of the investment. Investment risk, is related to the probability of actually earning less than the expected return—the greater the chance of low or negative returns, the riskier the investment. To compensate for that "higher risk" there is a risk premium to investors, which is the difference between the expected rate of return on a given risky asset and that on a less risky asset.

In lines 342 – 344 of Mr. Meredith's rebuttal testimony he shows a graph that illustrates some of the risks that are being evaluated in financial theory that is trying to capture the correct "risk premium" for a given risky asset. Under small stocks it shows a small-stock premium, equity risk premium, bond horizon premium, real riskless rate, and inflation. While these are generally accepted adjustments in theory for most publicly traded stocks, the Division does not believe that they are applicable to Carbon. When a company is subsidized by a government fund, it is incorrect to say that it as "risky" of an investment as a publicly traded company that does not have the same safety net. As a general statement utilities are considered a lower risk investment than most industries. Because the cash flows of a small rural Utah phone company are fairly static because of subsidization, the risk of that security is even lower than traditional utilities. Because Carbon receives money from USFs its risk is much different from traditional "small companies". Because of this decreased risk, there is no need to adjust the CAPM.

Mr. Meredith argues otherwise in his rebuttal testimony in lines 217 – 222. He states "[t]raditional methods of calculating a rate of equity for small companies has a tendency to understate the lack of access to equity markets and the corresponding return that is necessary to attract equity to remote locations in Utah." Mr. Meredith implies that using all the various financial

"tools" is necessary to ensure the cost of capital is adequate to attract capital and fairly compensate investors for the opportunity cost that is the basic principle of investing.

The Division disagrees because Carbon does not resemble such small companies in either risk or access to capital. Because the financial theories Mr. Meredith discusses deal with publicly traded companies who are generally exposed to the same market risks and challenges, a CAPM, or various cash flow models, or even comparable companies applies to such companies. The reality is that a small rural phone company that has access to capital has some inherent advantages not available to companies of the type the model assumes. These advantages make the companies less risky when looking at investment risk. This requires a lower return than a much more speculative and risky investment. As will be detailed later in my testimony, Carbon has some inherent advantages because of a State USF which lowers the cost of equity and the risks for small companies that are inherent in assumptions of financial models. Because of this fact the Division believes the CAPM model most likely overstates the appropriate cost of equity for rural phone companies. To adjust the rates for small companies, as suggested in financial theory, would be exacerbating the overstated cost of equity and therefore an unnecessary adjustment.

V. COMPARABLE COMPANIES

Q. MR. MEREDITH AND MR. BREVITZ MAKE A POINT THAT CHOOSING THE CORRECT COMPANIES IS VITAL WHEN DETERMING CAPM, DO YOU AGREE?

A. Yes. For the CAPM model it is important to get comparable companies when calculating a beta. The integrity of the model relies on the comparable companies accurately reflecting the subject company.

Q. CAN YOU EXPLAIN WHY YOU SELECTED THE COMPANIES YOU DID FOR YOUR CAPM CALCULATION?

A. Yes. The starting point was to use as many of the same companies as were used in Docket No. 08-046-01 because the Commission found that the Division's calculation produced fair and reasonable rates. Eight of the companies listed were used in both Manti and Carbon. Those companies are:

- Alaska Communications
- Consolidated Communications
- Frontier Communications
- IDT Corp
- Hickory Tech Corp
- Otelco
- Shenandoah Telecom
- Windstream Corp.

The different companies I added for this Docket were:

- Atlantic Tele-Network, Inc.
- Cincinnati Bell Inc.
- Alteva, Inc
- Earthlink Holdings Corp.

- Fairpoint Communications, Inc.

I selected these additional companies increase the number of companies to calculate an average beta that would get reasonable results. I specifically excluded large phone companies like AT&T, CenturyLink, and Verizon because they were vastly different than rural phone companies in Utah. Generally, I tried to find companies that had services and customers in some parts of the United States that would be considered rural.

Q. SO THE DIVISION HAS THEIR LIST, MR. MEREDITH HAS HIS QUESTIONS WITH COMPANIES ON THE LIST, MR. BREVITZ ALSO EXPRESSED A VARIETY OF RESERVATIONS. DO YOU THINK THEIR CONCERNS ARE VALID?

A. Yes, but for the entirely wrong reasons. In lines 230 – 235 Mr. Meredith argues "the CAPM is very sensitive to the selected peer group of publicly traded companies. The CAPM methodology assigns a risk premium based on this peer group to calculate a return on equity. So, the selection of similarly situated companies to be used for comparison is very important. Mr. Coleman uses 13 companies in his peer group. Examining this peer group shows serious problems that should give the Commission reservations in using his peer group." Mr. Brevitz in lines 157 – 159 of his testimony argues that the "inclusion of additional 'comparable companies' should be considered on well founded criteria." Each party that discusses the comparable

companies agree the peer group is vital for effectively determining the appropriate risk premium. Unfortunately, Mr. Meredith and Mr. Brevitz are silent on the most important fact in dealing with the selected peer group: very few, if any of the companies selected, have a state USF that will compensate those companies for operating in high cost areas of the country. As an example CenturyLink, as suggested by Mr. Brevitz offers service in at least 35 states in the country. CenturyLink is eligible for state USF funds in some of those states like Colorado, but does not qualify for any USF funds here in Utah. Obviously, companies like AT&T and Verizon may not be participating in reimbursements from a state USF fund.

Q. WHY DOES THE DIVISION BELIEVE IT IS SUCH AN IMPORTANT POINT THAT MOST COMPANIES ARE NOT PARTICIPATING IN A STATE USF FUND WHEN CALCULATING THE COST OF CAPITAL FOR SMALL RURAL PHONE COMPANIES IN UTAH?

A. As argued by Mr. Meredith and Mr. Brevitz finding the correct comparable companies is vital to having an accurate CAPM. Because most of the companies do not have state USF funds, the CAPM calculation is probably overestimating the appropriate cost of equity. The companies used as comparable companies are "riskier" investments because they do not have the USF funds. Because each company is riskier, one would logically believe the cost of equity for rural phone companies in Utah should be adjusted down

from a CAPM calculation. The risk or opportunity cost is sufficiently lower and as a result the required rate of return for investors would be less.

When calculating the cost of equity for the UUSF, when revenues are received from government funds, the equity received from those funds should have a zero cost. There is no risk with those revenues, and no traditional financial costs that should be considered. If the revenues received were from state of federal universal service funds then the cost should be zero, if rural phone companies used traditional methods of raising capital, i.e., stocks, bonds, etc. the cost of equity would be higher than zero to reflect a fair rate of return that would compensate investors for the risk of investing.

Q. BECAUSE OF ALL THE REASONS LISTED ABOVE IT SEEMS LIKE YOU ARE NOT REAL FOND OF CAPM, COULD YOU ILLUSTRATE WHY YOU STILL BELIEVE IT IS THE APPROPRIATE METHOD TO USE?

A. Yes. Because of the challenges and lack of reality in using CAPM for small rural phone companies, the redeeming value for this method is the end results. The true test of the CAPM is whether the model possesses explanatory power and forecasting ability. According to the "end result" doctrine used in basic regulatory rate makinga model should be judged by

its ability to predict and explain rather than the robustness of its assumptions.

When setting rates and determining the appropriate cost of equity for small rural phone companies, the Commission must use some method. Every financial model has problems, but CAPM is the one method where interested parties can use publicly available data to determine what the allowed rate of return should be on the rate base of subject utilities. Using the textbook CAPM calculation gets us in the pasture for the correct cost of equity, which with the limited publicly traded information is as exact as can be hoped for. Furthermore, using a text-book approach to calculating CAPM minimizes the use of additional financial assumptions that could undermine the credibility of a fair and reasonable cost of equity, allowing the Commission some level of comfort that calculated rates will be sufficient to attract the necessary capital.

CAPM has issues, but adjusting the rate of return further increases the challenges of the model. Instead of making it easier to fit the square peg into the round hole, modifying the calculation makes the peg even more square and the hole even rounder.

VI. ACCESS TO CAPITAL

Q. YOUR TESTIMONY JUST DISCUSSED ACCESSING FUNDS FROM EITHER THE BOND OR STOCK MARKET AS AN IMPORTANT ASSUMPTION OF THE FINANCIAL THEORIES. HAS CARBON USED THE TRADITIONAL MARKETS TO RAISE CAPITAL?

A. I do not believe Carbon has used the traditional financial methods to raise capital. In reviewing the annual reports of Carbon filed with the Commission from 2008 until the latest annual report filed with the Commission, Carbon has reported additional capital expenditures for each year. In a data request to Carbon, the Division asked for information showing any instance where Carbon issued bonds or stocks to cover these capital expenditures. In Carbon's response they state "[s]mall privately owned and cooperative carriers, such as Carbon obtain funds to invest in critical infrastructure largely through boutique bank loans, grants, and federal support. In addition, capital is raised through retained earnings from services that are purchased by carriers and end-user customers." Although no specifics were provided by Carbon, the Division believes that no debt or stock was used to finance these capital improvements. It appears that Carbon used either retained earnings or cash flow from operations to finance these capital expenditures.

Q. WHY IS IT IMPORTANT THAT CARBON IS NOT USING ISSUING OF STOCK OR BONDS TO FINANCE CAPITAL EXPENDITURES?

A. If Carbon is not using stocks or bonds to finance its capital needs, those revenues must be coming from operations, retained earnings, or other sources of capital. If the capital expenditures are covered by operations, that means each customer or rate payer is financing the capital improvements. Instead, if the capital costs are covered by retained earnings the financing is from a blend of rate payers and USF funds. Finally, one of the other sources of capital for small rural phone companies is the government subsidy for high cost loop support. The Division believes one of the main sources of revenue for the capital expenditures for Carbon is the monies received from the Federal and State Universal Service Funds.

Q. UNIVERSAL SERVICE FUNDS ARE SUPPOSED TO BE USED FOR HIGH COST SUPPORT AND CAPITAL IMPROVEMENTS, RURAL UTAH PHONE COMPANIES ARE USING THE MONEY AS CONTEMPLATED, SO WHY DOES IT MATTER IF USF FUNDS ARE PART OF RETAINED EARNINGS?

A. The Division has no problem with the basic tenets and purposes of USF. The problem surfaces when USF begins to blend with financial theory. I am unfamiliar with any model that adjusts or takes into consideration when the "investors" of capital are a government fund. As stated above and also argued by Mr. Meredith, Commissioners must set rates so that there is adequate capital that will flow to small rural phone companies. If Carbon has not

issued any stock or bonds to finance capital expenditures it appears capital is flowing to Carbon. If, as financial theory supposes, investors are risk-averse, capital should be flowing to rural phone companies in Utah because the perceived risk of investing is offset and minimized by a government fund that compensates companies for many of the business risks they face. Finally, it is important to consider where Carbon gets its financing for capital because of the opportunity cost assumption with investing. If a government fund is providing a bulk of the capital for Carbon, is there any delayed consumption for that fund and therefore an appropriate rate that should apply? Is there reduced risk to traditional investors because of a state USF that effectively lowers Carbon's cost of capital? Given these various questions and uncertainties the Commission should use a CAPM model without additional adjustments, recognizing it as an imperfect tool.

VII. HYPOTHETICAL CAPITAL STRUCTURE

Q. MR BREVITZ DISCUSSES THE REASONS THAT A HYPOTHETICAL CAPITAL STRUCTURE OF 35 DEBT AND 65 EQUITY IS NOT APPLICABLE IN THIS CASE, DO YOU AGREE?

A. No. The whole premise of Mr. Brevitz's argument seems to stem from a memo from the commission that explicitly rejected the proposed "Capital Structure Rule". As discussed in Mr. Duncan's and Mr. Meredith's rebuttal testimony there were a number of factors involved in developing the policy that is applied by the Division in rate cases. While it is accurate to suggest that the Commission was uncomfortable in having a formal rule to determine the hypothetical capital structure, it is also accurate to point out that the Commission has approved numerous rate cases where the Commission accepted the Division's policy of using at 65/35 hypothetical capital structure.

In the above mentioned docket 08-046-01 no parties disputed the use of a hypothetical capital structure, and the Commission accepted the hypothetical capital structure as producing fair and reasonable rates.

The irony of this is that the OCS was approved using a hypothetical capital structure when the company was highly leveraged and financed almost entirely by debt. Now, the OCS argues that a 65/35 capital structure is

unreasonable and must be adjusted to better reflect what is appropriate for a small rural phone company.

Q. THERE SEEMS TO BE A FAIR AMOUNT OF DISCUSSION OF THE MERITS OF USING A HYPOTHETICAL CAPITAL STRUCTURE. IS THERE ANOTHER OPTION BESIDES A HYPOTHETICAL CAPITAL STRUCTURE?

A. Yes. The best scenario when calculating the cost of equity for rate of return regulated companies who receive USF funds would be for the Commission to develop an optimal capital structure for small rural phone companies. If the Commission were to develop the optimal capital structure the Division would then be able to use this capital structure when calculating the allowed return for companies. An optimal capital structure would give clear signals to companies as to the level of debt and equity the Commission considers prudent for small rural phone companies.

Another benefit of an optimal capital structure is limited risk to citizens of Utah who pay into the USF. As demonstrated in this case, the capital structure can have an impact on the allowed rate of return. If a small rural phone company decides to use a capital structure that does not maximize the earnings of the company, rate payers may be exposed to higher USF surcharges because of this management decision. If the Commission sets an optimal capital structure this increased burden is reduced. Because a

company has the freedom to choose what capital structure it wants to develop for its company, it could still be 100 % equity if it is debt averse or a blend of debt and equity that is more objectively reasonable. Setting an optimal capital structure would signal the maximum equity threshold the Commission was going to reimburse to companies who are receiving USF.

Q. IS THE DIVISION RECOMMENDING USING AN OPTIMAL CAPITAL STRUCTURE?

A. No. As stated before, the Division is recommending the Commission use the same hypothetical capital structure with the sliding scale that has been used in other dockets. The Division is suggesting that if the Commission did not like a hypothetical capital structure and was uncomfortable using the actual capital structure of a company the best solution would be to calculate the optimal capital structure when receiving state USF funds.

VIII. CONCLUSION

Q. WHAT IS THE DIVISION'S RECOMMENDATION FOR THIS PETITION?

A. The Division recommends that the Commission use a 35 percent debt and 65 percent equity hypothetical capital structure and an allowed rate-of-return of

584 9.85 percent. The updated calculations are provided with my testimony as DPU
585 Exhibit 3.1 SR.

586 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

587 A. Yes it does.