- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

In the Matter of the Application For Increase of Rates and Charges and USF Eligibility for Carbon/Emery Telecom, Inc.

Docket No. 05-2302-01 Utah Division of Public Utilities Exhibit No. DPU 2.0

Prefiled Direct Testimony of George R. Compton, Ph.D.

For the Division of Public Utilities

Department of Commerce

State of Utah

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PUBLIC EXHIBIT

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I. INTRODUCTION, QUALIFICATIONS, AND SUMMARY

Docket No. 05-2302-01

O. What is your name, and by whom are you employed?

A. George R. Compton. I am a Technical Consultant for the Division of Public Utilities (UDPU, DPU, or Division) of the Utah Department of Commerce.

Q. What is your education and work experience?

A.. I hold a Bachelor's Degree from Brigham Young University, with majors in Mathematics and Psychology, and a minor in Philosophy. A portion of my undergraduate experience also took place at Stanford. Subsequent to earning a Master's Degree at BYU in Statistics, with minors in Psychology and Philosophy, I worked for McDonnell Douglas Astronautics in Southern California, principally as a probabilist.

Apart from some part-time teaching at BYU, my entire career since earning a Ph.D. in economics from UCLA in 1976 has been spent in utility regulation. For all but two of those years I have been employed by the Division, on whose behalf I have testified countless times before this Commission in cases involving electric, gas, and telephone utilities. In the two odd years, I was an independent consultant. My clients included UAMPS, UP&L, and U S WEST. The main area of my professional interest has been the application of economics principles to utility pricing and costing. For a number of years I was also the Division's primary cost-of-capital witness. My telephone work included developing terms and conditions for the sale of U S WEST territories and exchanges to independent telephone companies.

Q. What is your assignment in this case?

A. I will be presenting the Division=s analyses and recommendations regarding the capital structure and other capital-cost issues related to the Carbon/Emery Telecom, Inc. general rates application and requested increase from the Utah State Universal Service Fund (USF). The Division=s Chris Luras will be presenting our debt cost recommendation.

Did you participate in the recent UBTA-UBET general rate case? Q.

- A. Yes. I testified on those same assigned subjects.
- Q. How would you compare that case and the current Carbon/Emery case?
- As you recall, UBTA-UBET originally requested that their draw from the USF be A.

increased by some \$7 million, with no company rate increases. Subsequently that company stipulated with the Division and Committee of Consumer Services to a USF increase of about \$1 million, along with a combined local basic and EAS annual revenue increase of about \$700 thousand. Carbon-Emery is requesting a combined local and switched access annual revenue increase of some \$800 thousand, and new USF funding of about \$1.8 million. (They do not currently receive USF funding.) The main reason for the smaller USF request of Carbon/Emery is that, unlike the case with UBTA-UBET, Carbon-Emery is not asking for compensation for their acquisition premium (i.e., the amount paid to Qwest for the Price-Helper territory in excess of its depreciated book value). Like UBTA-UBET, Carbon-Emery is asking that its authorized revenue requirement be based upon a 50-50 equity-to-debt hypothetical capital structure, with hypothetical capital component costs as well.

Q. Have you prepared a summary table/exhibit for this case?

A. I have. It is the first page of Confidential Exhibit DPU 2.1. It starts with the amounts of rates increases and additional annual USF funding that Carbon-Emery seeks, and shows in two steps the aggregated effects of the various regulatory and accounting adjustments that the Division is recommending.

Q. Would you please summarize your primary recommendations in this case?

A. The Division recommends that the capital cost portion of Carbon/Emery=s revenue requirement be based upon its actual capital structure, which is 100% debt, and upon the actual cost of that debt, which is the interest rate that it actually pays. Various Division personnel also recommend adjustments to test year revenues, expenses, and the intrastate rate base. Combining all those factors, the Division maintains that local rate increases of half the level that Carbon-Emery is requesting B in addition to the full amount of the requested access revenues increase -- will be sufficient to cover its duly recognized (i.e., post DPU adjustments) costs in full. Unlike the case with UBTA-UBET, the suggested revenue increases are viewed as sufficient to enable that utility to meet its loan covenants without requiring any USF funding. As is also indicated on my summary table, the Division recommends that since Carbon-Emery=s capitalization contains no equity, that it receive no equity return.

II. JUSTIFICATIONS FOR DEPARTING FROM ACTUAL COSTS IN ESTABLISHING A UTILITY=S REVENUE REQUIREMENT

- Q. The two primary cost components for any corporation are operating costs and capital costs. What are the two primary components of capital costs?
- A. They are debt costs, or interest payments/obligations, and the return on equity, or shareholders= costs. Because the latter are subject to income taxes, reference is made to both before- and after-tax equity costs or returns on investment. With a co-op, the customers, members, or Apatrons@ are also the enterprise=s owners or shareholders. The principal portion of debt payments are not explicitly included in the revenue requirement, but are expected to be covered from depreciation and amortization, which constitute non-cash expenses.
- Q. Is there a general industry expectation as to the relative shares of a firm=s capital that are accounted for by those two elements, debt and equity?
- A. There is. In the utility business it is on the order of 50-50.
- Q. Is that 50-50 ratio uniformly adhered to by independent telephone companies in Utah?
- A. No, it is not. Historically, there have been companies that were almost entirely equity, and others that were almost entirely composed of debt. UBTA-UBET and Carbon-Emery are included among the latter.
- Q. Isn=t it good for a utility to be entirely debt free?
- A. It is not good for ratepayers in the context of formulating a regulated revenue requirement. That is because the pre-tax unit cost of equity can be two to three times the unit cost of debt. It is regarded as not Ajust and reasonable@ to require ratepayers to bear the additional costs that are based on what might be viewed as a Adeviant@ capital structure (in the sense of its departing greatly from a 50-50 balance).
- Q. What has the Division successfully advocated to protect the ratepayers from a

¹ Carbon-Emery is not a co-op, but rather a for-profit entity owned by a co-op, Emery Telecom.

revenue requirement burden associated with an inordinate amount of equity?

- A. For some time under such circumstances it has based its revenue requirement recommendations on a hypothetical, 50-50 (debt and equity) capital structure.
- Q. You have described the burden to ratepayers of paying actual capital costs when the capital structure is mostly equity. How about when a utility=s actual capital structure consists of a very high debt ratio? Since debt costs are so much lower than equity costs, wouldn=t it be to the ratepayers= advantage to have a utility that is close to 100% debt, and then use its actual capital structure in establishing the revenue requirement?
- A. That is fine as long as the utility can meet the loan/financial covenants that are imposed by its lender(s). As I mentioned in the recent UBTA-UBET case, the problem is that if the revenue requirement were developed strictly on your 100% debt basis, there may be no margin of safety in the event that revenues were below their test-year projections. Sub-par revenues could create an inability to make the required principal and interest payments on the debt without resorting to the capital markets (i.e., going further into debt in order to make debt payments). Faced with such a prospect, lenders will refuse to make loans with favorable terms and conditions. Absent the capital infusion from the loans in its normal course of business, the utility would be compromised in its ability to acquire the necessary plant and equipment to meets its growing service obligations.
- Q. What standard practice have lenders invoked to protect themselves against a payments default by the utilities to which they lend?
- A. They have imposed financial covenants that entail a number of cash flow, leverage, and earnings standards.
- Q. What financial covenants have been imposed on Carbon-Emery?
- A. They reported two that are imposed by CoBank, a principal lender to cooperatives. They are the debt service coverage ratio (DSCR), and the debt-to-operating-cash-flow ratio (DOCFR).
- Q. Would you please define those two ratios.
- A. Both ratios incorporate the firm=s operating cash flow, which constitutes its revenues

minus its cash operating expenses. The latter consist of the total operating expenses (which exclude capital costs and income taxes) minus depreciation and amortization, which are the non-cash operating expenses. An equivalent definition of operating cash flow is gross operating income (which is revenues minus total operating expenses) plus depreciation and amortization. The debt service coverage ratio is simply the ratio of the operating cash flow to the interest and principal payment to the lender. The debt-to-operating-cash-flow ratio is defined per its literal namesake. My Exhibit No. DPU 2.2 constitutes a derivation of operating cash flow as the sum of gross operating income and depreciation and amortization.

- Q. Is it the Division=s policy in the case of highly leveraged (i.e., high-debt) utilities to recognize financial covenant obligations rather than basing its revenue requirement recomendation on narrowly defined actual capital costs?
- A. Where appropriate, yes. In the case of UBTA-UBET the Division recommended local rate increases and an increase in USF funding that went beyond narrowly defined actual costs to enable that firm to meet its financial covenant obligations. But I would reiterate, the regulatory standard is to set a utility=s revenue requirement equal to whatever costs, including capital costs, that are found to be just and reasonable. Apart from extraordinary circumstances, e.g. where the equity ratio is extremely high or where additional revenues are required to enable the meeting of loan covenants, the revenue requirement should be based on actual costs and nothing more.²

III. CARBON-EMERY=S ABILITY TO MEET ITS LOAN COVENANTS ABSENT REVENUES THAT GO BEYOND ITS ACTUAL COSTS

Q. You mentioned that Carbon-Emery is subject to two loan covenants, the debt service coverage ratio (DSCR), and the debt-to-operating-cash-flow ratio (DOCFR). I assume they are the same two that apply to UBTA-UBET. Is it also true that just as

² In the case of a forecasted test year, Aactual costs@ are costs that are projected to be actually incurred.

the DOCFR was the more exacting requirement for UBTA-UBET, it is also the more difficult-to-achieve covenant in the case of Carbon-Emery?

- A. It is.
- Q. Have you prepared an exhibit which shows the DOCFR requirement and what is needed for Carbon-Emery to meet it?
- A. I have. It is labeled Case 2, which is page 4 of my Confidential Exhibit No. DPU 2.1.
- Q. Would you please discuss the contents of that Case?
- A. The actual costs-based revenue requirement (equaling, in this case, debt costs plus operating expenses) is shown on Line 14. Revenues equaling that magnitude are produced by adding the Company=s proposed increase in switched access revenues (Line 3) to both the current annual revenues (Line 1, as adjusted by the DPU witnesses) and the Division=s recommended portion (less than half) of Carbon-Emery=s sought-for local rates increase (Line 2). Line 22 shows the DOCF ratio that is produced by those revenues and the operating cash flow produced by those revenues given the Company=s operating expenses (Line 5) and depreciation and amortization (Line 19), again as adjusted by the DPU witnesses. Since the calculated DOCF ratio is below the required ceiling, one can conclude that no revenues beyond those that were just described B from either an additional rates increase or an infusion from the USF B are required for Carbon-Emery to meet the CoBank loan covenant.

Q. Does that final conclusion surprise you? And if so, why?

A. It does surprise me. AActual capital costs@ or Agross earnings@ in this context (which are revenues minus operating expenses, which in turn include depreciation but exclude interest expenses) are limited to merely the interest costs on the debt. So in this case the long-recognized TIER=s, or times-interest-earned-ratio=s, actual value would be 1, which is well below the minimum standard requirement of 1.5. Those of us who are more familiar with the TIER requirement would, accordingly, expect to see B as a margin of

 $^{^{3}}$ That portion translates to \$1 per month for both residential and commercial customers.

safety --required earnings that would be something in excess of the interest costs of debt.

- Q. If you can, would you please explain why the operating cash flow-based ratios have superceded the TIER ratio in establishing a firm=s ability to meet its debt payment obligations?
- A. I=ll try. Recall that the operating cash flow is comprised of the sum of gross operating income and the composite of depreciation and amortization. Gross operating income constitutes the pre-tax return on capital. The first claim on gross operating income is the interest expense. After deducting interest, income taxes are then determined. What remains constitutes the return on equity. Since interest is tax deductible, the entire amount of gross operating income is available for making interest payments if needs be.

Turning to the depreciation and amortization, recall that it is a non-cash expense that is also tax deductible. As a non-cash expense which is nevertheless included in the revenue requirement, its entire magnitude is available as cash for making principle payments B and even interest payments if the gross operating income was insufficient. So to conclude, lenders give priority consideration to a firm=s operating cash flow because it is that quantity that is available for making debt service payments.

- Q. If I=m following you correctly, the way that a firm can meet the DSCR and DOCFR standards while failing to satisfy a conventional TIER requirement is by having a compensatory quantity of non-cash expenses (i.e., depreciation and amortization) within the revenue requirement. The outcome is to make its operating cash flow satisfactorily large relative to the size of its debt and of its principal and interest payments.
- A. You=ve got it. You have described the case of Carbon-Emery. Referring to Lines 18 and 19 on page 4 of my Confidential Exhibit No. DPU 2.1, you=ll note that that firm=s depreciation and amortization expense is more than double its gross operating income.
- Q. But your results pertain to the DPU=s Aadjusted intrastate case@ for that company.

 Isn=t it true, though, that if, for example, the acquisition adjustment and the various

 Division revenue requirement inclusions and exclusions were considered, then the

firm might not be able to meet its loan covenants?

- A. Utilities in general, and Carbon-Emery is no exception, are expected to be able to get by (including earning a profit equal to their costs of capital) on the basis of cost allowances and revenue considerations that are deemed Ajust and reasonable. Laudably, Carbon-Emery in this case has abided by the regulatory condition that it agreed to when it acquired the Carbon County territory from Qwest B i.e., to not include the acquisition premium in its revenue requirement requests.
- Q. I have one more question. If you don=t allow through the revenue requirement the opportunity for Carbon-Emery to have equity earnings (and yes, I recall that this company has no equity upon which to earn a return), how will it ever overcome its problem of having a preponderance of debt?
- A. It can acquire equity the old-fashioned way B by soliciting funds from shareholders, which in this case include the phone company=s patrons. Also, an ability in the short run⁴ to reduce costs to levels below, or to raise revenues above, test year projections will generate extra profits that can be retained as equity.
- Q. Does that conclude your direct testimony?
- A. It does, thank you.

⁴ I say Ashort-run@ because prolonged above-cost earnings invite corrective regulatory review.