## - BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

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IN THE MATTER OF THE APPLICATION FOR INCREASE OF RATES AND CHARGES AND USF ELIGIBILITY FOR CARBON/EMERY TELCOM, INC. DOCKET NO. 05-2302-01

DPU Exhibit No. 4.0

## DIRECT TESTIMONY

## OF

## PAUL M. ANDERSON

## DIVISION OF PUBLIC UTILITIES DEPARTMENT OF COMMERCE STATE OF UTAH

November 16, 2005

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| 1  |    | I. IDENTIFICATION OF WITNESS  |
|----|----|---|
| 2  |    |   |
| 3  | Q. | PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION                                 |
| 4  |    | WITH THE DIVISION OF PUBLIC UTILITIES.  |
| 5  | A. | My name is Paul M. Anderson. My business address is Heber M. Wells Building,          |
| 6  |    | 160 East 300 South, 4th Floor, Salt Lake City, Utah. I am employed as a Utility       |
| 7  |    | Analyst for the State of Utah in the Division of Public Utilities. I am testifying on |
| 8  |    | behalf of the Division of Public Utilities (DPU).                                     |
| 9  |    |   |
| 10 | Q. | WHAT ARE YOUR EDUCATIONAL BACKGROUND,   |
| 11 |    | QUALIFICATIONS AND EMPLOYMENT EXPERIENCE?   |
| 12 | A. | My qualifications are summarized on the attached DPU Exhibit 4.1.                     |
| 13 |    |   |
| 14 |    |   |
| 15 |    | II. PURPOSE OF TESTIMONY  |
| 16 |    |   |
| 17 | Q. | PLEASE STATE THE PURPOSE OF YOUR TESTIMONY.   |
| 18 | A. | The purpose of my testimony is to present the DPU's engineering analysis              |
| 19 |    | pertaining to the Company's request for rate increase and USF Eligibility.            |
| 20 |    |   |
| 21 |    |   |
| 22 |    |   |

## 23 III **COMPANY OVERVIEW** 24 25 **Q**. HAS THE DPU REVIEWED THE SWITCHING, MICROWAVE AND 26 **OUTSIDE PLANT NETWORK UPGRADES THAT CARBON/EMERY** 27 HAS MADE OVER THE PAST TWO YEARS? 28 A. Yes. The DPU conducted a field visit to the Carbon/Emery area and observed 29 deteriorated plant that had been removed and replaced with state-of-the-art 30 technologies used to upgrade the outside plant infrastructure. New copper and 31 fiber optic cables have been installed to replace old lead sheath and paper 32 insulated cables that were degrading phone service. Fiber optic cables were 33 placed to extend services in the Price and Helper exchanges. Moreover, the 34 Company has installed a new AirSpan microwave system to provide service to a 35 remote Questar Gas CO<sub>2</sub> plant as well as telecommunication services to new 36 subdivisions in Cleveland. Carbon/Emery has taken advantage of purchasing 37 surplus modular fiber repeater buildings from a company who exited the market, 38 to economically be used as remote terminal sites for the fiber builds. 39 40 Since Carbon/Emery's purchase of the service area from Qwest, it has striven to 41 bring the switches and outside plant up to industry standards to facilitate 42 improved service to its subscribers. Switch growth jobs, software updates and 43 new outside plant cable jobs appear to be in line with what would be expected as 44 reasonable plant investments.

| 45 |    | However, the DPU, during its field visit, could not verify the board approved      |
|----|----|--|
| 46 |    | outside plant cable jobs shown in Company Exhibit S-5.2 because most of the        |
| 47 |    | jobs were not yet budgeted, engineered or constructed. Revenue requirement         |
| 48 |    | recommendations for these projects are further discussed in the direct testimony   |
| 49 |    | of DPU witnesses David Thomson and John Gothard.                                   |
| 50 |    |  |
| 51 |    |  |
| 52 |    | IV. LOCAL TRANSPORT AND END OFFICE SWITCHING RATES                                 |
| 53 |    |  |
| 54 | Q. | HAS THE DIVISION REVIEWED THE CURRENT AND PROPOSED                                 |
| 55 |    | ACCESS RATES CONSISTING OF LOCAL TRANSPORT AND END                                 |
| 56 |    | <b>OFFICE SWITCHING FOR CARBON/EMERY?</b>  |
| 57 | A. | Yes. The access rates consist of two components: Local Transport and End           |
| 58 |    | Office Local Switching. The Local Transport rate is the rate charged to carry the  |
| 59 |    | traffic of other carriers i.e. CLEC, LD or internet providers, etc. The End Office |
| 60 |    | Local Switching rate is the rate charged these same carriers for switching their   |
| 61 |    | traffic at the local switch closest to the customer. The current rates, used by    |
| 62 |    | Carbon/Emery are based on a 2001 GVNW Consulting, Inc. rate study. The             |
| 63 |    | Company is proposing to increase rates for local transport from \$0.001061/min. to |
| 64 |    | \$0.005600/min., an increase by a factor of 5.3. The Company is proposing to       |
| 65 |    | increase rates for local switching from \$0.010800/min. to \$0.036900/min., an     |
| 66 |    | increase by a factor of 3.4. Carbon/Emery developed these new rates by dividing    |

| 67 |    | the Company's projected access revenue requirement by the year 2004 minutes of           |
|----|----|--|
| 68 |    | use (MOU) and with Citizens' traffic removed because of Citizens' rerouting              |
| 69 |    | decision.  |
| 70 |    |  |
| 71 | Q. | HOW DO THE COMPANY PROPOSED ACCESS RATES FOR   |
| 72 |    | CARBON/EMERY COMPARE WITH INDUSTRY AVERAGES IN   |
| 73 |    | RURAL TELCOS IN UTAH?  |
| 74 | A. | The Company proposed access rate for local transport is about one third of the           |
| 75 |    | Utah average and the Company proposed access rate for end office local                   |
| 76 |    | switching is almost twice the Utah average. See DPU Exhibit 4.2. Although the            |
| 77 |    | Company proposed local transport rate is higher than their current rate, the DPU         |
| 78 |    | is concerned that this rate is still significantly lower than the average rural rate, is |
| 79 |    | not based on cost, and may appear to be anti-competitive.                                |
| 80 |    |  |
| 81 | Q. | IS THERE ANY OTHER METHODOLOGY THAT HAS BEEN USED IN                                     |
| 82 |    | UTAH TO DETERMINE ACCESS RATES?  |
| 83 | A. | Yes. In Docket No. 03-2403-02 the DPU used the HAI 5.2a Cost Model with                  |
| 84 |    | Commission Ordered Adjustments developed in Docket No. 01-049-85, to model               |
| 85 |    | access rates for both local transport and switching for interconnection to Western       |
| 86 |    | Wireless as required in Utah Code, Title 54-8b-3.3.                                      |
| 87 |    |  |

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| 88  |    | The DPU developed access rates for UBTA-UBET, Manti, SCUTA and Gunnison           |
|-----|----|---|
| 89  |    | telephone companies to apply to interconnection with wireless companies (See      |
| 90  |    | DPU Exhibit 4.3). Additionally, a flat monthly switch port rate was proposed, as  |
| 91  |    | was also proposed in the Qwest Docket No. 01-049-85. The DPU believes that        |
| 92  |    | the Companies for which the rates were set are only applying them to wireless     |
| 93  |    | interconnection. That being said, the model develops rates that are not based on  |
| 94  |    | technologies. For that reason, the DPU recommends that the HAI 5.2a model         |
| 95  |    | should be used to develop access rates for Carbon/Emery.                          |
| 96  |    |   |
| 97  | Q. | WHY DOES THE DPU SUPPORT A FLAT RATED SWITCH PORT                                 |
| 98  |    | RATE RATHER THAN USING MINUTES OF USE?  |
| 99  | A. | The DPU believes that the flat switch port rate developed by the Commission       |
| 100 |    | adopted HAI model is based on costs and will avoid the appearance of being anti-  |
| 101 |    | competitive. It is easier to use and does not require the traffic measurement     |
| 102 |    | effort.   |
| 103 |    |   |
| 104 | Q. | DOES EXHIBIT 4.3 PORTRAY THE TOTAL END OFFICE ACCESS                              |
| 105 |    | RATE?   |
| 106 | A. | No. The Exhibit outlines a grocery list of access services that can be purchased  |
| 107 |    | by a third party. For example, one could purchase either host/remote switching    |
| 108 |    | by minutes of use (MOU) or purchase a flat rated end office switch port which the |
| 109 |    | DPU supports.   |

| 110   | Q.              | DOES THE DPU RECOMMEND A COST MODEL APPROACH TO  |
|---|-----------------|--|
| 111   |                 | DETERMINING NEW ACCESS RATES FOR CARBON/EMERY BASED  |
| 112   |                 | ON COST TO PROVIDE THE SERVICE?  |
| 113   | A.              | Yes. The DPU recommends that the Commission order a cost study using the HAI   |
| 114   |                 | 5.2a cost model as amended by the Commission for Carbon/Emery and Emery  |
| 115   |                 | Telecom to develop both transport and local switching access rates and   |
| 116   |                 | recommends that a completion date of November 30, 2006, be set by the  |
| 117   |                 | Commission. It is suggested the cost study for local transport and switching be  |
| 118   |                 | required prior to consideration of further rate case or USF support filings by   |
| 119   |                 | Emery Telecom or Carbon/Emery.   |
| 120   |                 |  |
|   |                 |  |
| 121   | Q.              | DOES THE DPU PROPOSE NEW ACCESS RATES FOR  |
| 121<br>122  | Q.              | DOES THE DPU PROPOSE NEW ACCESS RATES FOR<br>CARBON/EMERY?   |
|   | <b>Q.</b><br>A. |  |
| 122   | -               | CARBON/EMERY?  |
| 122<br>123  | -               | <b>CARBON/EMERY?</b><br>Not at this time. The DPU suggests that, until the cost study is complete, the   |
| 122<br>123<br>124   | -               | <b>CARBON/EMERY?</b><br>Not at this time. The DPU suggests that, until the cost study is complete, the<br>Commission adopt the Company's proposed rates of \$0.00560/min. for local  |
| 122<br>123<br>124<br>125  | -               | CARBON/EMERY?<br>Not at this time. The DPU suggests that, until the cost study is complete, the<br>Commission adopt the Company's proposed rates of \$0.00560/min. for local<br>transport and of \$0.03690/min. for end office switching as shown in Company                   |
| <ol> <li>122</li> <li>123</li> <li>124</li> <li>125</li> <li>126</li> </ol>                           | -               | CARBON/EMERY?<br>Not at this time. The DPU suggests that, until the cost study is complete, the<br>Commission adopt the Company's proposed rates of \$0.00560/min. for local<br>transport and of \$0.03690/min. for end office switching as shown in Company                   |
| <ol> <li>122</li> <li>123</li> <li>124</li> <li>125</li> <li>126</li> <li>127</li> </ol>              | -               | CARBON/EMERY?<br>Not at this time. The DPU suggests that, until the cost study is complete, the<br>Commission adopt the Company's proposed rates of \$0.00560/min. for local<br>transport and of \$0.03690/min. for end office switching as shown in Company<br>Exhibit S-2.2. |
| <ol> <li>122</li> <li>123</li> <li>124</li> <li>125</li> <li>126</li> <li>127</li> <li>128</li> </ol> | -               | CARBON/EMERY?<br>Not at this time. The DPU suggests that, until the cost study is complete, the<br>Commission adopt the Company's proposed rates of \$0.00560/min. for local<br>transport and of \$0.03690/min. for end office switching as shown in Company<br>Exhibit S-2.2. |

| 132 | А. | Yes. The current rates that Carbon/Emery charges are based on previous Qwest      |
|-----|----|---|
| 133 |    | rates at the time the exchanges were purchased of \$0.99 for residence and \$1.49 |
| 134 |    | for business.   |
| 135 |    |   |
| 136 | Q. | ARE EAS RATES IN CARBON/EMERY COMPARABLE TO OTHER                                 |
| 137 |    | RURAL TELEPHONE COMPANIES IN UTAH?  |
| 138 | А. | No. The current rates that Carbon/Emery charges for EAS are much lower            |
| 139 |    | compared with most other rural telephone companies in Utah. See DPU Exhibit       |
| 140 |    | 4.4.  |
| 141 |    |   |
| 142 | Q. | DOES THE DPU PROPOSE NEW EAS RATES FOR CARBON/EMERY?                              |
| 143 | А. | No. The DPU notes that the current EAS rates are low for Carbon/Emery since       |
| 144 |    | they were set when Qwest owned the territory and were averaged over the entire    |
| 145 |    | Qwest subscriber base. The DPU is concerned that the rate set by Qwest and        |
| 146 |    | adopted by Carbon/Emery may not cover the cost incurred by Carbon/Emery to        |
| 147 |    | provide EAS as required in Utah Code, Title 54-8b-3.3. Rather than raise EAS      |
| 148 |    | rates now, the DPU proposes that the Commission order the Company and DPU         |
| 149 |    | to develop study criteria for an EAS traffic study for Emery Telecom and          |
| 150 |    | Carbon/Emery. The DPU recommends that the commission order the completion         |
| 151 |    | of the EAS traffic study by November 30, 2006. This effort will provide the DPU   |
| 152 |    | the database on which staff can determine what the new EAS rates for              |
| 153 |    | Carbon/Emery should be.   |
|     |    |   |

| 154 |    | VI. DEPRECIATION RATES  |
|-----|----|---|
| 155 |    |   |
| 156 | Q. | DID THE DPU REVIEW THE PROPOSED CHANGES IN  |
| 157 |    | DEPRECIATION RATES BY CARBON/EMERY?   |
| 158 | A. | Yes. The DPU has no problem with the changes proposed for the underground         |
| 159 |    | cable, buried cable and intra-building net categories because they appeared to be |
| 160 |    | within a reasonable range.  |
| 161 | Q. | DOES THE SERVICE LIFE OF THE BUILDING ACCOUNT, 2110.2,                            |
| 162 |    | THAT CARBON/EMERY IS PROPOSING APPEAR TO BE                                       |
| 163 |    | <b>REASONABLE?</b>  |
| 164 | A  | A. No. Carbon/Emery is proposing that the depreciation rate be raised from 3.33%  |
| 165 |    | to 5.00% for the building account. This change will move the service life from 30 |
| 166 |    | years to 20 years. The DPU does not agree with this change. Most rural and        |
| 167 |    | incumbent telephone companies in Utah use 30 years or more including              |
| 168 |    | Carbon/Emery's parent company, Emery Telecom. A handful of rural companies        |
| 169 |    | use 25 to 29 years. Experience in telecommunications engineering costs studies    |
| 170 |    | reflect the fact that buildings should last 30 years or more. The Company         |
| 171 |    | provided no supporting documentation for this change, and therefore,              |
| 172 |    | the DPU recommends that the depreciation rate stay at 3.33%. See direct           |
| 173 |    | testimony of David Thompson for further discussion of depreciation rates for      |
| 174 |    | Carbon/Emery.   |
| 175 |    |   |

| 176 |    | VII. CONCLUSION   |
|-----|----|---|
| 177 |    |   |
| 178 | Q. | PLEASE SUMMARIZE YOUR RECOMMENDATIONS.  |
| 179 | A. | In conclusion the DPU is recommending that Carbon/Emery use their proposed        |
| 180 |    | rate for local transport of \$0.00560/min. and for end office switching of        |
| 181 |    | \$0.03690/min. until new rates can be developed.                                  |
| 182 |    |   |
| 183 |    | The DPU does not believe the access rates that Carbon/Emery currently use, those  |
| 184 |    | that they have proposed, and the average rural telephone access rates as shown in |
| 185 |    | each Company's tariff, are based on the costs to provide access service.          |
| 186 |    | Therefore, the DPU recommends that the Commission order Carbon/Emery to           |
| 187 |    | provide data for the development of a cost study using the Commission modified    |
| 188 |    | HAI 5.2a cost model before any new rate case filing.                              |
| 189 |    |   |
| 190 |    | The DPU also believes the existing EAS rates for Carbon/Emery are low and is      |
| 191 |    | recommending that the Commission order Carbon/Emery to conduct an EAS             |
| 192 |    | traffic study on all its central offices to determine minutes of use (MOU) for    |
| 193 |    | calculating an accurate stimulation factor for each exchange. Moreover, this      |
| 194 |    | study will identify capital costs associated with the provisioning of EAS trunks  |
| 195 |    | and thereby aid the DPU and the Company in determining new EAS rates for a        |
| 196 |    | reasonable recovery of these costs.   |
|     |    |   |

| 198 |    | Both the access rate and EAS studies should be conducted concurrently and |
|-----|----|---|
| 199 |    | completed by November 30, 2006 before any new rate cases are requested.   |
| 200 |    |   |
| 201 |    | The DPU has no problem with the change in depreciation rates for the      |
| 202 |    | underground cable, buried cable and inter-building net categories, but    |
| 203 |    | recommends the buildings depreciation rate stay at 3.33%.                 |
| 204 |    |   |
| 205 | Q. | DOES THIS COMPLETE YOUR TESTIMONY?  |
| 206 | А. | Yes it does. Thank you.   |

# VII. EXHIBIT(S)

# Page Number

| Exhibit 4.1 | Qualifications                        | 14 |
|-------------|---------------------------------------|----|
| Exhibit 4.2 | Switched Access Rates in Utah         | 15 |
| Exhibit 4.3 | Access Rates from Previous Cost Study | 16 |
| Exhibit 4.4 | EAS Rates in Utah                     | 17 |

| 207<br>208   | <u>DPU Exh</u> | ibit 4.1 – Qualifications   |
|--|----------------|---|
| 200<br>209<br>210                                    | -              | Bachelor of Science, Engineering Degree, University of Utah   |
| 211<br>212   | -              | Extensive BELLCORE TECHNICAL training in the telecommunications industry.   |
| 213<br>214<br>215                                    | -              | NARTE Certified Engineer (National Association of Radio and Telecommunications Engineers) while employed at US West.  |
| 216<br>217<br>218<br>219<br>220                      | -              | Over 30 years experience in the telecommunication industry. Extensive background in facility and switch planning, designed SONET/digital transmission systems for interoffice facilities, developed and analyzed long range incremental cost studies, facilitated and developed local loop integrated planning.   |
| 221<br>222<br>223<br>224<br>225<br>226<br>227<br>228 | -              | Instrumental in the development and direction of fiber based Broadband<br>strategies, and the establishment of survivability and diversity for the US West<br>switch and facility network. Over 7 years experience engineering and<br>constructing backbone fiber rings for MCI using Sonet self-healing fiber optic<br>ring design. Scheduled and managed construction jobs, obtained permits and<br>worked with customers and contractors on site surveys for building entrance and<br>riser cable designs. |
| 229<br>230<br>231<br>232<br>233<br>234               | -              | Monitored and initiated modernization strategies for US West's interoffice<br>facility and switch network for Utah, Idaho and Montana. Provided Company<br>direction for orderly economic network evolution; includes making<br>recommendations to high level managers  |
| 235<br>236   | -              | Translated customer needs to technical requirements and analyzed future emerging technologies and network elements.   |
| 237<br>238<br>239<br>240                             | -              | Prepared, and tracked capital and expense operating budget for facility and switch projects through approval, co-ordination and completion of the project.  |
| 240<br>241<br>242<br>243<br>244<br>245<br>246        | -              | Planned and engineered local access feeder and distribution cable facilities for<br>Utah. Planned and engineered structure reinforcements such as underground<br>conduit and pole line facilities. Analyzed feeder routes to allocate cable pairs to<br>distribution points. Conducted plant rehabilitation studies to determine areas to<br>be upgraded. Developed construction budget (\$20M).  |
| 240<br>247<br>248<br>249<br>250<br>251<br>252        | -              | Received the following recognition and awards: (1) <i>Network Stars Award for</i><br><i>Contributions to Excellence</i> , N&TS, 1990, (2) <i>Volunteer of the Year Award</i> , Salt<br>Lake City School District, 1992, (3) <i>On-The-Spot Award</i> , LATA Network<br>Planning, 1992 and (4) <i>Award of Excellence</i> , Brooks Fiber Communications,<br>1997.  |