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T.R.A. DOCKET ROOM

TENNESSEE REGULATORY AUTHORITY

IN RE. APPLICATION OF JACKSON ENERGY AUTHORITY FOR A  
CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO  
PROVIDE TELECOMMUNICATIONS SERVICES AS A CARRIERS'  
CARRIER

DOCKET NO 03-00438

REBUTTAL TESTIMONY AND EXHIBITS  
OF  
DWIGHT S. WORK

NOVEMBER 4, 2003

1     **Q.     Please state your name and business address.**

2     A.     My name is Dwight Work. My business address is 206 Capitol Boulevard, Nashville,  
3             Tennessee 37219-1801.

4     **Q.     Are you the same Dwight Work that pre-filed direct testimony in this matter on**  
5             **behalf of Jackson Energy Authority?**

6     A.     Yes, I am.

7     **Q.     What is the purpose of your rebuttal testimony in this docket?**

8     A     I will respond to a portion of the pre-filed testimony of Mr William J. Barta, specifically his  
9             comments regarding the network investment assigned or allocated to the Telephone  
10            Business Unit. The implication of Mr. Barta's testimony appears to be that Jackson  
11            Energy Authority ("JEA") is somehow trying to be deceptive in the way the business  
12            model is structured or that JEA has somehow structured its business model to remove it  
13            from regulatory oversight of the Tennessee Regulatory Authority ("TRA").

14           Before we get drawn into this forest of implication, we need to step back and look at the  
15           realities of the regulatory requirements. The TRA does not regulate the rates of a  
16           Competitive Local Exchange Carrier ("CLEC"), a carriers' carrier, a cable system, or an  
17           internet service provider. The regulatory focus is to keep captive customers of regulated  
18           enterprises from subsidizing the competitive operations of a regulated enterprise.

19           The captive customers of JEA are its electric, natural gas, wastewater, and water  
20           customers. The competitive customers of JEA will be its cable, CLEC, and internet  
21           customers. The regulatory focus then as well as the focus of JEA is to make sure that  
22           procedures are in place to prevent the improper subsidization of the competitive  
23           customers by the captive customers during the normal course of business.

1     **Q.     Does JEA have those procedures in place?**

2     A     Yes they do. We have developed a Cost Allocation Manual that will prevent or limit, to the  
3           extent possible, this subsidization from taking place.

4     **Q.     Does it matter from a regulatory focus that the Cable Business Unit owns the**  
5           **assets?**

6     A.     It does not. The regulatory focus is the same no matter which business unit owns the  
7           assets. The focus is to limit subsidization of the competitive division, in this case the  
8           Telecommunications Division, by the regulated divisions of JEA. We have accomplished  
9           that through the Cost Allocation Manual. In fact, I believe we have gone further than  
10          required.

11    **Q.     What do you mean?**

12    A     I am not convinced that the TRA has any interest in the allocations within the competitive  
13          division (the Telecommunications Division). However, the Board and Management of JEA  
14          are interested because they want to know how the business units are performing. Good  
15          decisions can only be made with good information. Since we developed the factors for  
16          each business unit, we filed this with the TRA for information purposes. But, I am not sure  
17          it is required.

18    **Q.     Let us assume for a moment that the allocations within the competitive division are**  
19          **of interest to the TRA. Does it matter that the telephone business unit owns none**  
20          **of the plant assets?**

21    A.     No, it does not.

22    **Q.     Will the Telephone Business Unit use the assets?**

23    A.     Yes, it will.

1     **Q.     Why, then, does it not matter?**

2     A     There are at least two approaches in dealing with depreciable assets that have a  
3           common use. One approach is to allocate the plant to each entity that uses the plant  
4           There is nothing wrong with this approach when the use is constant over time or is  
5           anticipated to be constant over time. An example of this might be an office building for a  
6           utility that provides water and wastewater service to its customers. The water service  
7           personnel occupy 50 percent of the building and the wastewater personnel occupy 50  
8           percent of the building. In this example, one might allocate 50 percent of the building cost  
9           to each division. The cost remains constant, annual depreciation expense remains  
10          constant, and accumulated depreciation is charged with the same annual depreciation  
11          expense each year.

12          The second approach is to allow one entity to own the asset and charge a rental fee for  
13          use of the asset. This approach is more applicable than the first approach when the  
14          potential use of the asset is subject to change. The JEA model is an example of this  
15          approach. In Year 1, the Telephone Business Unit may use 5 percent of the bandwidth  
16          that is used by the Telecommunications Division. If we follow the first approach, we  
17          allocate 5 percent of the plant, depreciation expense, and accumulated depreciation to  
18          the Telephone Business Unit. Let us assume that in Year 2, the Telephone Business Unit  
19          uses 10 percent of the bandwidth used by the Telecommunications Division. Again, if we  
20          use the first approach, we will have to allocate 10 percent of the plant in service,  
21          depreciation expense, and accumulated depreciation to the Telephone Business Unit.  
22          This reallocation process has the potential of continuing each year that the  
23          Telecommunications Division is in existence. It creates problems with monthly  
24          bookkeeping, monthly reporting, and decision making. The better way under this scenario  
25          is to charge a rental fee for access to the system. This is the method JEA used.

1     **Q.     Does the rental fee paid by the Telephone Business Unit fully compensate the**  
2     **Cable Business Unit for use of its system?**

3     A.     Yes, it does. JEA asked me to take an independent look at the access amount paid by  
4     the Telephone Business Unit to determine if it covered the fully distributed costs of  
5     accessing the system.

6     **Q.     How did you do that?**

7     A.     I developed carrying charge factors to estimate the revenue requirement of the annual  
8     additions to plant that can be jointly used by each business unit within the  
9     Telecommunications Division.

10    **Q.     What is included in these carrying charge factors?**

11    A.     The access charge includes. (1) a return on the investment, (2) taxes on the return, (3)  
12    annual depreciation on the investment; (4) property tax on the investment, (5) and,  
13    annual recovery of all cable-related charges, excluding expenses related to  
14    programming.

15    **Q.     Is this an appropriate way to develop the carrying charge factor?**

16    A.     Yes, it is, with one possible exception. My carrying charge factor includes allocated costs  
17    from the regulated divisions that are included in administrative and general expense in  
18    the Cable Business Unit. One would not normally include these costs in the development  
19    of a carrying charge factor because they are also allocated through the cost allocation  
20    manual. I have not been able to completely identify these costs to strip them out

21    **Q.     How are these factors used?**

22    A.     The factors are multiplied by each year's addition to plant to determine the revenue  
23    requirement associated with the plant

1     **Q.     Is there another step?**

2     A     Yes, there is. Once the revenue requirement is developed, it must be assigned to each of  
3           the three business units of the Telecommunications Division Management of JEA  
4           informs me that 40 percent of the fibers from the head-end facility to the core can be  
5           used by telephone and internet. We then used the business model of JEA to develop the  
6           estimated telephone usage versus internet usage of this 40 percent. We multiplied the  
7           estimated customers using various bandwidths for telephone and internet to develop an  
8           estimate of the annual usage. I have attached a schedule as Exhibit A that shows this  
9           calculation.

10    **Q.     What did you do next?**

11    A.     We multiplied the revenue requirement by the percent of usage associated with the  
12           Telephone Business Unit to obtain the annual access fee required from the Telephone  
13           Business Unit I have attached a schedule as Exhibit B that shows the result of this  
14           calculation.

15    **Q.     Mr. Barta has criticized JEA because the Telephone Business Unit has no**  
16           **employees. Do you view this as a problem?**

17    A.     No, I do not The Telephone Business Unit will receive the allocation of fully distributed  
18           costs of employees in the regulated divisions of JEA The Telephone Business Unit will  
19           also pay for their appropriate portion of the employees that are directly assigned to the  
20           Cable Business Unit through the access charge

21    **Q.     Does this conclude your testimony?**

22    A.     Yes, it does.

AFFIDAVIT

I, Dwight S. Work, do hereby affirm that the foregoing rebuttal testimony and attached exhibits are true and correct to the best of my knowledge and belief

Dwight S. Work

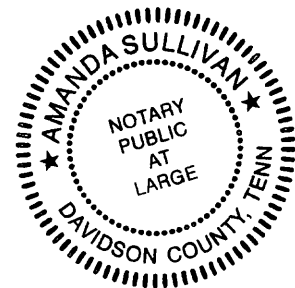
Sworn to and subscribed before me

This 4<sup>th</sup> day of November, 2003

Amanda Sullivan

NOTARY PUBLIC

My commission expires on: September 22, 2007



**Jackson Energy Authority**  
**Calculation of Estimated Bandwidth Usage**

| Line No.   | (1)<br>Description       | (2) (3) (4) (5)<br>Year 1 |                |         | (6) (7) (8) (9)<br>Year 2 |                |           |         |
|------------|--------------------------|---------------------------|----------------|---------|---------------------------|----------------|-----------|---------|
| Telephone: |                          |                           |                |         |                           |                |           |         |
|            | Customer Type            | Average Number of Lines   | Bandwidth Used | Total   | Average Number of Lines   | Bandwidth Used | Total     |         |
| 1          | Residential              | 99                        | 128            | 12,672  | 1,287                     | 128            | 164,736   |         |
| 2          | Small/Medium business    | 210                       | 128            | 26,880  | 2,100                     | 128            | 268,800   |         |
| 3          | Large business           | 13                        | 128            | 1,600   | 163                       | 128            | 20,800    |         |
| 4          | Subtotal                 |                           |                | 41,152  |                           |                | 454,336   | 11 06%  |
|            |                          |                           |                |         |                           |                |           |         |
| Internet:  |                          |                           |                |         |                           |                |           |         |
|            |                          | Average Number of Lines   | Bandwidth Used | Total   | Average Number of Lines   | Bandwidth Used | Total     |         |
| 5          | Residential              | 184                       | 256            | 46,976  | 821                       | 256            | 210,176   |         |
| 6          | Residential              | 75                        | 1536           | 115,200 | 375                       | 1536           | 576,000   |         |
| 7          | Residential              | 125                       | 3072           | 384,000 | 800                       | 3072           | 2,457,600 |         |
| 8          | Small/Medium business    | 38                        | 512            | 19,200  | 150                       | 512            | 76,800    |         |
| 9          | Small/Medium business    | 20                        | 1536           | 30,720  | 110                       | 1536           | 168,960   |         |
| 10         | Small/Medium business    | 6                         | 3072           | 19,200  | 44                        | 3072           | 134,400   |         |
| 11         | Large business           | 1                         | 10240          | 7,680   | 3                         | 10240          | 28,160    |         |
| 12         | Subtotal                 |                           |                | 622,976 |                           |                | 3,652,096 | 88 94%  |
|            |                          |                           |                |         |                           |                |           |         |
| 13         | Total Bandwidth consumed |                           |                | 664,128 |                           |                | 4,106,432 | 100 00% |



**Jackson Energy Authority**  
**Calculation of Estimated Bandwidth Usage**

| (1)                         | (2)                     | (3)            | (4)       | (5)     | (6)                     | (7)            | (8)        | (9)     |
|-----------------------------|-------------------------|----------------|-----------|---------|-------------------------|----------------|------------|---------|
| Telephone:                  |                         |                |           |         |                         |                |            |         |
| Customer Type               | Average Number of Lines | Bandwidth Used | Total     |         | Average Number of Lines | Bandwidth Used | Total      |         |
| 14 Residential              | 3,869                   | 128            | 495,264   |         | 6,328                   | 128            | 809,952    |         |
| 15 Small/Medium business    | 5,530                   | 128            | 707,840   |         | 8,601                   | 128            | 1,100,960  |         |
| 16 Large business           | 413                     | 128            | 52,800    |         | 675                     | 128            | 86,400     |         |
| 17 Subtotal                 |                         |                | 1,255,904 | 12.77%  |                         |                | 1,997,312  | 13.84%  |
|                             |                         |                |           |         |                         |                |            |         |
| Internet:                   |                         |                |           |         |                         |                |            |         |
|                             | Average Number of Lines | Bandwidth Used | Total     |         | Average Number of Lines | Bandwidth Used | Total      |         |
| 18 Residential              | 1,577                   | 256            | 403,584   |         | 1,685                   | 256            | 431,360    |         |
| 19 Residential              | 842                     | 1536           | 1,292,544 |         | 1,205                   | 1536           | 1,850,112  |         |
| 20 Residential              | 1,975                   | 3072           | 6,067,200 |         | 2,958                   | 3072           | 9,085,440  |         |
| 21 Small/Medium business    | 288                     | 512            | 147,200   |         | 352                     | 512            | 180,320    |         |
| 22 Small/Medium business    | 230                     | 1536           | 353,280   |         | 282                     | 1536           | 432,768    |         |
| 23 Small/Medium business    | 88                      | 3072           | 268,800   |         | 126                     | 3072           | 386,880    |         |
| 24 Large business           | 5                       | 10240          | 47,360    |         | 6                       | 10240          | 66,304     |         |
| 25 Subtotal                 |                         |                | 8,579,968 | 87.23%  |                         |                | 12,433,184 | 86.16%  |
|                             |                         |                |           |         |                         |                |            |         |
| 26 Total Bandwidth consumed |                         |                | 9,835,872 | 100.00% |                         |                | 14,430,496 | 100.00% |

**Jackson Energy Authority**  
**Calculation of Estimated Bandwidth Usage**

| (1)                         | (2)                     | (3)            | (4)        | (5)     | (6)                     | (7)            | (8)        | (9)     |
|-----------------------------|-------------------------|----------------|------------|---------|-------------------------|----------------|------------|---------|
| Telephone:                  |                         |                |            |         |                         |                |            |         |
| Customer Type               | Average Number of Lines | Bandwidth Used | Total      |         | Average Number of Lines | Bandwidth Used | Total      |         |
| 27 Residential              | 7,366                   | 128            | 942,839    |         | 7,513                   | 128            | 961,696    |         |
| 28 Small/Medium business    | 9,984                   | 128            | 1,277,920  |         | 10,106                  | 128            | 1,293,600  |         |
| 29 Large business           | 973                     | 128            | 124,480    |         | 1,130                   | 128            | 144,640    |         |
| 30 Subtotal                 |                         |                | 2,345,239  | 13 35%  |                         |                | 2,399,936  | 12.48%  |
|                             |                         |                |            |         |                         |                |            |         |
| Internet:                   | Average Number of Lines | Bandwidth Used | Total      |         | Average Number of Lines | Bandwidth Used | Total      |         |
| 31 Residential              | 1,197                   | 256            | 306,432    |         | 911                     | 256            | 233,216    |         |
| 32 Residential              | 1,565                   | 1536           | 2,403,072  |         | 1,821                   | 1536           | 2,797,056  |         |
| 33 Residential              | 3,687                   | 3072           | 11,324,928 |         | 4,099                   | 3072           | 12,590,592 |         |
| 34 Small/Medium business    | 357                     | 512            | 182,560    |         | 387                     | 512            | 198,080    |         |
| 35 Small/Medium business    | 285                     | 1536           | 438,144    |         | 273                     | 1536           | 419,616    |         |
| 36 Small/Medium business    | 153                     | 3072           | 469,440    |         | 155                     | 3072           | 475,200    |         |
| 37 Large business           | 9                       | 10240          | 91,034     |         | 11                      | 10240          | 115,814    |         |
| 38 Subtotal                 |                         |                | 15,215,610 | 86 65%  |                         |                | 16,829,574 | 87 52%  |
|                             |                         |                |            |         |                         |                |            |         |
| 39 Total Bandwidth consumed |                         |                | 17,560,849 | 100 00% |                         |                | 19,229,510 | 100 00% |

**Jackson Energy Authority**  
**Calculation of Estimated Bandwidth Usage**

| (1)                         | (2)                     | (3)            | (4)               | (5)                     | (6)            | (7)               | (8) | (9)            |
|-----------------------------|-------------------------|----------------|-------------------|-------------------------|----------------|-------------------|-----|----------------|
| Telephone:                  | Year 7                  |                |                   | Year 8                  |                |                   |     |                |
| Customer Type               | Average Number of Lines | Bandwidth Used | Total             | Average Number of Lines | Bandwidth Used | Total             |     |                |
| 40 Residential              | 7,664                   | 128            | 980,930           | 7,817                   | 128            | 1,000,548         |     |                |
| 41 Small/Medium business    | 10,229                  | 128            | 1,309,280         | 10,351                  | 128            | 1,324,960         |     |                |
| 42 Large business           | 1,150                   | 128            | 147,200           | 1,170                   | 128            | 149,760           |     |                |
| 43 Subtotal                 |                         |                | <u>2,437,410</u>  |                         |                | <u>2,475,268</u>  |     | <u>12.29%</u>  |
|                             |                         |                |                   |                         |                |                   |     |                |
| Internet:                   | Average Number of Lines | Bandwidth Used | Total             | Average Number of Lines | Bandwidth Used | Total             |     |                |
| 44 Residential              | 929                     | 256            | 237,824           | 948                     | 256            | 242,560           |     |                |
| 45 Residential              | 1,858                   | 1536           | 2,853,120         | 1,895                   | 1536           | 2,910,720         |     |                |
| 46 Residential              | 4,180                   | 3072           | 12,840,960        | 4,264                   | 3072           | 13,097,472        |     |                |
| 47 Small/Medium business    | 418                     | 512            | 213,760           | 423                     | 512            | 216,320           |     |                |
| 48 Small/Medium business    | 287                     | 1536           | 441,120           | 317                     | 1536           | 486,720           |     |                |
| 49 Small/Medium business    | 157                     | 3072           | 480,960           | 185                     | 3072           | 568,320           |     |                |
| 50 Large business           | 13                      | 10240          | 135,475           | 15                      | 10240          | 149,811           |     |                |
| 51 Subtotal                 |                         |                | <u>17,203,219</u> |                         |                | <u>17,671,923</u> |     | <u>87.71%</u>  |
|                             |                         |                |                   |                         |                |                   |     |                |
| 52 Total Bandwidth consumed |                         |                | <u>19,640,629</u> |                         |                | <u>20,147,192</u> |     | <u>100.00%</u> |

**Jackson Energy Authority**  
**Calculation of Estimated Bandwidth Usage**

| (1)                         | (2)                     | (3)            | (4)        | (5)     | (6)                     | (7)            | (8)        | (9)     |
|-----------------------------|-------------------------|----------------|------------|---------|-------------------------|----------------|------------|---------|
| Year 9                      |                         |                |            |         | Year 10                 |                |            |         |
| Telephone:                  |                         |                |            |         |                         |                |            |         |
| Customer Type               | Average Number of Lines | Bandwidth Used | Total      |         | Average Number of Lines | Bandwidth Used | Total      |         |
| 53 Residential              | 7,973                   | 128            | 1,020,559  |         | 8,133                   | 128            | 1,040,970  |         |
| 54 Small/Medium business    | 10,474                  | 128            | 1,340,640  |         | 10,596                  | 128            | 1,356,320  |         |
| 55 Large business           | 1,190                   | 128            | 152,320    |         | 1,210                   | 128            | 154,880    |         |
| 56 Subtotal                 |                         |                | 2,513,519  | 12.16%  |                         |                | 2,552,170  | 12.04%  |
| Internet:                   |                         |                |            |         |                         |                |            |         |
|                             | Average Number of Lines | Bandwidth Used | Total      |         | Average Number of Lines | Bandwidth Used | Total      |         |
| 57 Residential              | 967                     | 256            | 247,424    |         | 986                     | 256            | 252,416    |         |
| 58 Residential              | 1,933                   | 1536           | 2,969,088  |         | 1,972                   | 1536           | 3,028,224  |         |
| 59 Residential              | 4,349                   | 3072           | 13,360,128 |         | 4,436                   | 3072           | 13,627,392 |         |
| 60 Small/Medium business    | 428                     | 512            | 218,880    |         | 433                     | 512            | 221,440    |         |
| 61 Small/Medium business    | 348                     | 1536           | 533,760    |         | 378                     | 1536           | 581,280    |         |
| 62 Small/Medium business    | 214                     | 3072           | 656,640    |         | 243                     | 3072           | 747,840    |         |
| 63 Large business           | 16                      | 10240          | 164,557    |         | 18                      | 10240          | 179,712    |         |
| 64 Subtotal                 |                         |                | 18,150,477 | 87.84%  |                         |                | 18,638,304 | 87.96%  |
| 65 Total Bandwidth consumed |                         |                | 20,663,996 | 100.00% |                         |                | 21,190,474 | 100.00% |

**Source: JEA business plan.**

Jackson Energy Authority  
Carrying Charge  
Years Ending June 30, 2003 through 2012

| Line No. | (1)<br>Description   | (2)<br>Amount | (3)<br>Year 1<br>Revenue<br>Requirement | (4)<br>Year 2<br>Revenue<br>Requirement | (5)<br>Year 3<br>Revenue<br>Requirement | (6)<br>Year 4<br>Revenue<br>Requirement | (7)<br>Year 5<br>Revenue<br>Requirement | (8)<br>Year 6<br>Revenue<br>Requirement | (9)<br>Year 7<br>Revenue<br>Requirement | (10)<br>Year 8<br>Revenue<br>Requirement | (11)<br>Year 9<br>Revenue<br>Requirement | (12)<br>Year 10<br>Revenue<br>Requirement |
|----------|----------------------|---------------|---|---|---|---|---|---|---|--|--|---|
| 1        | Year 1 investment    | \$ 18,265,701 | \$ 3,027,072                            | \$ 4,835,353                            | \$ 4,322,402                            | \$ 4,115,599                            | \$ 4,105,625                            | \$ 4,116,156                            | \$ 4,104,275                            | \$ 4,056,521                             | \$ 4,021,761                             | \$ 3,997,736                              |
| 2        | Year 2 investment    | 13,985,576    | -                                       | 2,317,751                               | 3,702,305                               | 3,309,552                               | 3,151,208                               | 3,143,571                               | 3,151,634                               | 3,142,537                                | 3,105,973                                | 3,079,359                                 |
| 3        | Year 3 investment    | 9,433,205     | -                                       | -                                       | 1,563,312                               | 2,497,187                               | 2,232,277                               | 2,125,475                               | 2,120,324                               | 2,125,763                                | 2,119,627                                | 2,094,965                                 |
| 4        | Year 4 investment    | 3,119,556     | -                                       | -                                       | -                                       | 516,986                                 | 825,818                                 | 738,213                                 | 702,893                                 | 701,190                                  | 702,989                                  | 700,959                                   |
| 5        | Year 5 investment    | 2,902,486     | -                                       | -                                       | -                                       | -                                       | 481,013                                 | 768,355                                 | 686,845                                 | 653,983                                  | 652,399                                  | 654,072                                   |
| 6        | Year 6 investment    | 2,925,190     | -                                       | -                                       | -                                       | -                                       | -                                       | 484,775                                 | 774,365                                 | 692,218                                  | 659,099                                  | 657,502                                   |
| 7        | Year 7 investment    | 2,867,721     | -                                       | -                                       | -                                       | -                                       | -                                       | -                                       | 475,251                                 | 759,152                                  | 678,619                                  | 646,150                                   |
| 8        | Year 8 investment    | 2,821,469     | -                                       | -                                       | -                                       | -                                       | -                                       | -                                       | -                                       | 467,586                                  | 746,908                                  | 667,673                                   |
| 9        | Year 9 investment    | 2,808,435     | -                                       | -                                       | -                                       | -                                       | -                                       | -                                       | -                                       | -  | 465,426                                  | 743,458                                   |
| 10       | Year 10 investment   | 2,891,239     | -                                       | -                                       | -                                       | -                                       | -                                       | -                                       | -                                       | -  | -  | 479,149                                   |
| 11       | Total                | \$ 62,020,578 | \$ 3,027,072                            | \$ 7,153,104                            | \$ 9,588,019                            | \$ 10,439,324                           | \$ 10,795,941                           | \$ 11,376,545                           | \$ 12,015,588                           | \$ 12,598,950                            | \$ 13,152,800                            | \$ 13,721,023                             |
| 12       | Percent to telephone |               | 2.48%                                   | 4.42%                                   | 5.11%                                   | 5.54%                                   | 5.34%                                   | 4.99%                                   | 4.96%                                   | 4.92%                                    | 4.86%                                    | 4.82%                                     |
| 13       | TBU access fee       |               | \$ 75,071                               | \$ 316,453                              | \$ 489,756                              | \$ 577,921                              | \$ 576,503                              | \$ 567,917                              | \$ 596,454                              | \$ 619,364                               | \$ 639,752                               | \$ 660,804                                |