

February 26, 2013

**Virginia:**

AT A CONTINUED MEETING of the Nelson County Broadband Authority Board at 7:00 p.m. in the Board of Supervisors Room located in the Nelson County Courthouse.

Present: Constance Brennan, Central District  
Larry D. Saunders, South District – Vice Chair  
Allen M. Hale, East District  
Thomas H. Bruguire, Jr. West District  
Stephen A. Carter, County Administrator  
Candice W. McGarry, Secretary  
Andrew Crane, Information Systems Technician  
Susan Rorrer, Director of Information Systems

Absent: Thomas D. Harvey, North District - Chair

**I. Call to Order**

Mr. Saunders called the meeting to order at 7:07 pm, with four Members present to establish a quorum and Mr. Harvey being absent.

**II. Public Comments**

There were no persons wishing to be recognized for public comments.

**III. New/Unfinished Business**

**A. Broadband Authority Rates, Fees, and Charges**

Mr. Carter noted that staff had gone back and reviewed the transport rates only and that the tower rates, collocation fees etc. had not been revised. Ms. Rorrer then noted that transport rates were defined as leases of bandwidth traveling over the network to reach a customer. Mr. Carter noted that the new rates were based on sending signals along the lit fiber and that the transport enables service providers to sell services to the end user.

Mr. Carter then provided some background noting that staff had previously met with the Broadband Subcommittee and reviewed the first set of revised rates; which were introduced at the last meeting; which was then continued. He then explained that Ms. Rorrer had subsequently gotten Rockbridge County's rates that were developed by Design Nine; Andrew Cohill's firm. Mr. Carter noted that Mr. Cohill has expertise in the broadband field and is considered a guru in the industry.

He further explained that at the last meeting, Members wanted staff to relook at these rates and staff sent them to Dr. Cohill and another consultant group out of North Carolina for review, Blue Ridge Advisory Group. He noted again that both of these firms have extensive expertise in this area. He added that staff had only asked that they provide comment on the rates and that one of the firms did so as a courtesy. He then noted that they both thought the Authority's proposed rates looked good and they concurred with the revised transport rates. Mr. Carter then noted that Ms. Rorrer and Baylor Fooks of BRI worked on

these and the result was from an evolution of comments from both Dr. Cohill and Bob Picchi of the North Carolina firm Blue Ridge Advisory Group. He noted that the end result was rates that were not exactly the same as Rockbridge's but were modified slightly to include a more concise tiered system that they thought would better serve the NCBA.

Ms. Brennan then confirmed that the transport rates were NCBA charges to service providers and that they would choose between these Tiers on a per customer basis for Tier 1. The revised proposed rates were presented as follows:

### Proposed Local Access Transport Rates

Class of Service		Speed (Mbps)	MRC
<u>Tier 1</u> Last Mile (E7 to ONT)		25x5	\$ 25
		50x10	\$ 50
<u>Tier 2</u> Last Mile or Service Provider Middle Mile (OLT to ONT/OLT)		25x25	\$ 75
		50x50	\$ 200
		100x100	\$ 300
		250x250	\$ 700
		500x500	\$ 850
		1,000x1,000	\$ 1,000
<u>Tier 3</u> Private WAN	Two Site WAN "P2P" (ONT to ONT)	25	\$ 250
		100	\$ 800
		500	\$ 1,280
		1,000	\$ 1,660
	Three or More Site WAN "Cloud" (per node)	100	\$ 500
		500	\$ 800
		1,000	\$ 1,040

E7 - NCBA network equipment

ONT - Network termination device for home or business customer

OLT - Network termination device for service provider

WAN - Wide Area Network (connects multiple sites for a single customer, for example schools)

P2P - Point to point connection (connects two sites for a single customer, for example planning to Courthouse

Cloud - Connects multiple sites without utilizing dedicated point to point circuits

Mr. Carter reviewed the Tier 1 options, noting that in this Tier the up and down speeds were asymmetrical; whereas in the Tier 2 option, they were symmetrical and cost more. He then explained that Tier 3 options were point to point connections and cloud connections and were primarily for an end user that needed to connect multiple sites. He noted the connections between schools as an example. It

was noted that the point to point utilized dedicated bandwidth and the Cloud or WAN connection was a shared bandwidth connection. It was noted that MRC stood for monthly recurring charges. He added that the emphasis from Tier 1 to Tier 2 was to be sure that the Authority could attract providers to provide affordable services and then it ramped up with the higher end Tier 3 services. He noted that the objective was to have rates conducive to affordable service provision to customers.

Additionally, Members were provided with the following overview from staff:

**NCBA Proposed Transport Rate Overview – February 26, 2013**

- A spreadsheet showing the proposed rate structure for NCBA transport rates is attached. (*see above*)
- Proposed transport rates are classified in three tiers or classes of service:
  - Tier 1: Asymmetrical transport services that extend to a business or residence
  - Tier 2: Symmetrical transport services that extend to a business, residence or service provider device
  - Tier 3: Wide Area Network transport services that provide connectivity between multiple sites of a single customer
- Transport rates are rates for use of the network by service providers to reach customers. No internet access is included in the rate. Internet access, available bandwidth and service rates are the responsibility of the service provider.
- Rates were developed using a blend of original NCBA rates and RANA (Rockbridge Area Network Authority) rates with a goal of enabling service providers to deliver affordable broadband services to customers.
- The rates were developed with input from consultants, service providers, County staff and Broadband Subcommittee.
- Anticipated low end service offerings for wired (fiber or copper) services to the customer are as follows (high end service offerings have not been calculated):
  - Residential or Business Service                      25 mbps down/5 mbps up      \$60.00
  - Residential or Business Service                      25 mbps down/25 mbps up    \$165.00
- No changes are proposed for tower and shelter colocation fees or dark fiber rates as these rates were determined to be reasonable and competitive.

Additional considerations:

- Connection fees will still be an obstacle with connections averaging \$2,000.00 for Fiber To The Premise. Should service providers opt to finance the connection, an additional fee to the customer of approximately \$60.00 per month for three years would be required. This would bring the cost of a 25/5 mbps service to approximately \$120.00 per month and the cost of a 25/25 service to approximately \$225.00 per month.

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- The cost of the 100 x 100 mbps circuit is \$100.00 higher than in the previously proposed rates and may adversely impact DSL deployments. BRI anticipates that this rate may necessitate pre-selling a certain number of DSL customers prior to deploying equipment at a given location.
- The proposed rates will enable service offerings to be made available in the immediate future however; rates may require additional changes in the future to ensure the success of the network.
- Per megabit pricing for the 50 x 50 mbps circuit is slightly higher than for both the 25 x 25 circuit and the 100 x 100 mbps circuit. This is primarily due to lowering the cost on the 25 x 25 circuit to achieve a desired rate to the customer. Cost of the 50 x 50 circuit can be lowered if desired.

In response to questions, Mr. Andrew Crane noted that there was no difference in the equipment needed to accommodate the different speeds of service.

Mr. Carter then reiterated that staff was not proposing that the Authority make a decision that night, rather that they take the information, look at it, and possibly make a decision regarding proceeding to a public hearing at the regular meeting on Thursday.

Mr. Carter added that in comparison to the original rates currently authorized and developed by Icon, the difference was really on the lower end services; however for the higher end services, the rates were comparable. He added that the new rates served a dual purpose on the ends of the spectrum and were confirmed to be market competitive in the comments provided by Andrew Cohill and Bob Picchi.

Ms. Brennan then confirmed that these charges would be the first costs to the service providers they would have to cover in determining their rates to the customer.

Ms. Rorrer then pointed out the projected cost to the end user for the Tier 1 and Tier 2 services listed on the overview sheet as follows:

- Anticipated low end service offerings for wired (fiber or copper) services to the customer are as follows (high end service offerings have not been calculated):
  - Residential or Business Service (Tier 1)      25 mbps down/5 mbps up      \$60.00
  - Residential or Business Service (Tier 2)      25 mbps down/25 mbps up      \$165.00

Mr. Carter added that these were based on a fiber connection and DSL connection could be less costly and in the \$35 to \$45 range. It was noted that connections from the fiber to the end user was another issue that would have to be tackled. Ms. Rorrer explained that someone like BRI would use one of the Tier 2 services to connect to their DSL equipment and then service would be deployed over the Verizon Copper. She noted that this cost would then be spread across the number of end users at speeds of about 5 mbps. In response to questions, Mr. Crane noted that they would probably be providing an asymmetrical service. Mr. Carter then reiterated that the Tier 2 and Tier 3 offerings would be for service providers who wanted to serve multiple customers.

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Members then inquired of Mr. Stewart of SCS, how fast the speeds were for satellite service and he noted that with Excede Satellite he was able to offer 5-12 mbps. He noted that there was a big difference between satellite, wireless, and DSL services in terms of speeds and latency issues.

Ms. Rorrer noted that the 100 x100 service was most commonly used by DSL service providers and that if this cost were increased from \$200 to \$300 per month, it may have some impact on deployment and end user costing. She added that providers may have to pre-sell DSL ports in their equipment prior to committing to buying the service to guarantee a certain level of revenues to recoup their investment. Ms. Rorrer explained that the providers would pay \$300 for the 100 x100 circuit in order to sell services to twelve to forty-eight customers. It was reiterated that these costs being discussed were transport costs to the service provider. Ms. Rorrer directed Members to look at the second bullet of the overview sheet for further explanation.

Mr. Stewart added that he had a price from BRI and that included the price paid to NCBA for transport and confirmed that the rates being discussed were not the charges to the end user. He noted that he would take the BRI cost to him, consider his customer base and this would go into his calculations for cost per customer.

Members and staff briefly discussed getting an idea of what the additional costs would be for network operation and Mr. Carter noted that staff had essentially done this and they would not vary too much depending on the number of customers. Mr. Carter noted there was a set monthly fee with some variables if the numbers went up and Ms. Rorrer noted that there would be additional charges for the provisioning of new customers and a small charge for billing. She noted that the NCBA would not have that many customers and the costs for billing would be minimal. She noted that these costs had been covered in the pro formas that were done; however these needed more work and should possibly go out further into the future past year one.

Mr. Carter then reiterated that staff had gotten outside unbiased opinions from experts who said that the transport rates should be looked at but that the other rates were good. He noted that staff had added some additional levels of service and the revised rate structure was an enabler to get service providers to begin to provide affordable services on both ends of the rate spectrum.

Ms. Rorrer added that she thought the revised rates would accomplish the Authority's goal of getting affordable rates to small businesses and residences and would be conducive to providers of all types of service. She noted it was a good starting point in getting things out there but wanted to caution the Board that they had no control over what the service provider ultimately charged its customers.

Mr. Hale asked what the budgetary impact to the County was as compared to the other rates and Mr. Carter noted that staff needed to continue to work on this but preliminary numbers showed a deficit at the end of year 1 of around \$38,000 with the first set of revised rates and now the deficit was around \$32,000. He noted this was not a significant difference and that they had used known revenue sources in the pro forma; however growth was needed in order for the operations to sustain itself. Members and staff agreed that predicting the number of subscribers and the levels of service subscribed to was difficult.

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Mr. Carter then reported that staff was working with SCS to get the lease done as quickly as possible. He added that the Authority Board may need to approve it when it was ready or since it was drafted pursuant to the approved rates, the Chair could just sign off on it.

Mr. Stewart then advised that the Authority needed to consider some things before approving the rates and that he was concerned that the lease may have language in it that was counter to their thoughts on the rates that may affect his calculations. He noted that he had issues with the original rate structure; but has accepted them; however he would like for all to stay in agreement that they would all work hard to make it work as they saw what the adoption rates became.

He then noted that his other issue was with the fact that all of the towers were priced the same with no regard as to how many customers could be served or how many antennas could be placed on them. He added that he wanted to make sure that these things were reviewed periodically for feasibility. Mr. Stewart then noted that the proposed transport rates were more than fair and that he was currently paying more.

Mr. Carter noted that they would resolve these things between the parties and regardless of how the lease unfolded; the rates would be reviewed periodically on an ongoing basis.

Ms. Rorrer then clarified that Mr. Stewart's comments were more related to the tower and colocation fees at this point. Mr. Carter then explained that SCS would buy bandwidth from someone else such as Lumos, Cogent, or Mid-Atlantic Broadband and then would pay NCBA to transport it across the NCBA network. Ms. Rorrer noted that a lease with Mid-Atlantic Broadband was also near completion.

Mr. Bruguere noted that he thought that the lowered rates were good to get people on board. Mr. Carter then advised the Members to review the information provided in preparation for Thursday's meeting. He reiterated that the Broadband Subcommittee had endorsed the previous set of revised rates and these did not differ substantially. He added that Mr. Taylor had noted that he would like more time to review these, however he had provided some initial comments.

Mr. Joe Lee McLellan then advised the Authority that it may behoove them to make a deal with SCS or other providers to allow them to use the facilities for x amount of time at a discount and then recoup these charges once the customers were on board. He added that it would be helpful if they did not have to pay the full fees up front before they had the first customer.

Mr. Stewart advised the Authority that he had gone another route that entailed a slow build up approach and not populate the entire tower all at once. He added you would start with a start up set, then go to a minimum set and then a complete set. For example, he noted that in Afton using his own bandwidth, his start up fees were \$675/month and when the radio count was up it went to \$1,275/ month and then a full complete tower set up with fiber would be \$3,325/month. He noted that there was a large variance in his Profit and Loss analysis by tower location.

Mr. Carter then noted that on Thursday he would like to revisit this, take additional questions, and hopefully get the Authority's approval to move forward with advertising the rates and putting the proposed rates in effect until formally approved; which the County Attorney had advised was okay. He reiterated that the new rate resolution would revise the transport rates only, as the others were fine.

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**IV. Other Business (As May Be Presented)**

There was no other business considered by the Authority.

**V. Adjournment**

At 7:50 pm Ms. Brennan moved to adjourn and Mr. Hale seconded the motion. There being no further discussion, Members voted unanimously by voice vote to approve the motion and the meeting adjourned.