

PANGAEA Agreement Questions:

In November, 2007 a group of county staff and other individuals with widespread broadband experience began to discuss how Rutherford County could best proceed with the implementation of the Golden LEAF Broadband grant. Based on those early discussions, which are attached, the county formed a Broadband Team and continued meeting on how to implement this grant. Over the last two years multiple meetings have taken place. The county began moving forward with the broad concept of how it would proceed with PANGAEA. As a result, the county and PANGAEA held meetings with both Duke Energy and Rutherford Electric where it was explained that the fiber build out would be on the pole attachment agreements of PANGAEA and the relationship between the county and PANGAEA would be as described in the currently proposed agreement. This is consistent with the original Rutherford County/PANGAEA agreement dated November 5, 2007. Both the County Attorney and the outside attorney specializing in fiber issues have reviewed the current pole attachment agreements.

Some questions raised deal with alternative lease and management arrangements. The county has never stated that other arrangements are not possible; however, after two years of an open process that brought us to where we are, we believe that it is counterproductive to spend additional research and expense to continue to renegotiate this agreement based on the fact that we are where we currently find ourselves. To reiterate, two years of process have taken place. A Memorandum of Understanding setting forth the broad parameters of this current agreement was unanimously approved by Commissioners on August 3, 2009. The agreement, in substantially the same form as of today, was placed on the agenda dated November 2, December 7, and December 21. Until December 21, 2009 there were no questions raised about the agreement.

Grant funds have built the 100 miles of fiber in Rutherford County. This agreement allows for a stronger system managed by one entity, PANGAEA. As negotiated by county staff, the county will receive 10% of gross revenue from future customers and a corresponding reduction in the maintenance and management fee paid to PANGAEA as IRUs would be utilized and used for government, commercial, industrial and other economic development purposes. To reiterate, County Attorney Beth Miller and additional expert council Marcus Trantham have been involved in the agreement.

This information is not intended to be all encompassing to every question received by the county staff. Based on job responsibilities and other time demands, the presentation of January 4 and the availability of the public documents, we think that the county has made a reasonable accommodation to answer questions. In addition, other document requests are being processed in the month of January.

The following information is attached.

- (1) Broadband Discussions from early meetings where outside experts advised that PANGAEA should own the sheath. Minutes are transcripts.
- (2) Information on the county insurance coverage.
- (3) Job Description of county IT staff
- (4) Memorandum of Understanding

Taped broadband team meeting held 11/16/2007

Gail: Conversation last week as we were trying to finalize the school project we had the opportunity to increase the fiber count in some of the laterals to the schools. We looked at those routes and wanted ONUG to get us estimates on increasing to East High School which will run out to East Middle and Sunshine. The original plan to East was 24, so we are asking ONUG to look at the engineering on that and increasing to fiber count to 72. ONUG is waiting on pricing of Fiber. Cliffside run was also discussed, plan routes was through Chase Middle and Chase High School, have requested ONUG take a look at running it down 221-A and making the fiber count 72, mainly because Duke Power is on that end of the county. The run to Pinnacle probably needs to be 72 as well because of Queens Gap. Still have 72 going out to Mount Vernon, Ruth, and RS Central, will extend on to Pinnacle. Marie has identified the fire departments on the map, some discussion on the number of laterals in the design. Last week we talked about whether the county wants to own the fiber and lease IRU's back to PANGAEA, or do we want PANGAEA to own the sheath and the county own the IRU's in the sheath similar to the arrangement we have with the schools. Tim, Benny, Julie & Gail talked with Danny & Charlie and truthfully there are no advantages or disadvantages either way. It is just a decision for this group to make and something we need to make very soon. Since Kerry and Jim are on the PANGAEA board, can you give reasons why it would be a good idea and or not, and certainly meet with PANGAEA is discuss. **Jim:** does not think that the legislature has seen the last of the efforts to constrain public ownership of network. To me that would be the big unknown. If the county does own the fiber and the legislature changes the rules, this would be a risk to the county owning the fiber because you might own something that is a lot more expensive and constrained than you originally planned. **Gail:** Danny Huffman, President of ONUG, Charlie Pittman, EMC. Danny stated that as local government we could get a discount on pole access fees. This was the biggest advantage that the County would have if they own it. **JIM:** that may be worth a call to the utility companies. And if the county owns is all liability falls to the county. **Gail:** ONUG will be happy to provide the maintenance service for the county. **John:** we never wanted to start a separate set of responsibilities on certain sets of poles verses another set of pole. **Gail:** I think that could be an issue. **Jim:** PANGAEA fiber to this pole and then it is the Counties fiber, the dmark and trying to trace fiber could get difficult. ONUG is not doing support of the electronics. **Tim:** My position all along has been the need unity of management and unity of equipment. Or one throat to choke, who do I contact when the fiber is down, we need one person to call. **Gail:** Huge benefit for PANGAEA to own the Sheathe and you have one person to call. Very important that we have redundancy in the system and ONUG will be happy to help engineer this. **Jim:** And if we are looking at a regional connection if PANGAEA owns then we are dealing with one provider in the entire process. **Gail:** they both said, Charlie and Danny, we need redundancy and that was most important in this project.

Gail: Pros to county owningReduced pole rate, county can do what they want. County would be the decision maker, currently we have restrictions in place but we would negotiate changing those restrictions. **Jim:** do you want to server businesses through a county network or do you want other providers to serve business. For the county to be out there competing for business could get ugly.

John: not sure about the financial stability of PANGAEA in 3 years. **Jim:** PANGAEA's position is still that if they went out of business, if that all Polk County fiber would go to Polk County and all Rutherford County fiber would go to Rutherford County.

Gail: Con to county owning Fiber.....County responsible for all liability, it staff limitation, maintenance complicated, constructed with current contract, Danny said the County should not have problems getting pole right, but could take 30 to 60 days.

Gail: Pros to PANGAEA owning, county has not liability, they are already established in the county and have pole rights, single point of failure.

Gail: Con to PANGAEA, county has to pay rates they are getting on the access ******(as of 12/29/09, we are paying that lower rate today)*******, possible conflicts of use o fiber. IRU you can do what you wish with your IRU.

Tim: If PANGAEA has exit strategy for selling the fiber, just talking about dark fiber, but we may not be negotiating with PANGAEA. What prevent PANGAEA from selling assets to other entities? If they sale it PANGAEA is nonprofit what will they do with the money. **Jim:** they are talking about selling dark fiber but not the tunnel. **Tim:** is there anything preventing them from selling the fiber. **Jim:** they do not have an exit strategy, what if they sell it, what they are going to do with the money, they are not for profit and his has to go back to the community. **Gail:** these are thing that we need to discuss with PANGAEA. Questions about PANGAEA, what is the current makeup of the PANGAEA board, 11 members. There are some openings. **Jim:** I don't understand the lack of trust and PANGAEA is not acting in the interest of Polk County but for its whole service area. **GAIL:** set in on all the meeting and there was a lot said and we had differences of opinions and each were looking out for their own interest. **Jim:** If it is a matter of amending the bylaws to include more members then the board will be open for that. **Tim:** May board wants me to pursue with Ron down the Road as a regional advisory board as the next phase will be connectivity to other county, make room on the board for other county people down the road.

John: do you have any idea of how many fiber PANGAEA would want in this build. **Gail:** do we ask what they want or tell them what we think, ask them what they would like to see in the build. **Tim:** who is going to own. All fiber terminate on public land and access, intent lay 3 layers of single on that fiber, that is one more consideration. Are their funds available for wireless from those end points, if they put in money they will become players in that game as far as interruption of service. **Roger:** in the event of an emergency, we can't go don't we have to have redundancy. **John:** the best thing that happen to PANGAEA is the county partnered in the lateral system of the schools and they have half of their maintenance fees taken away and PANGAEA will sell the IRU's that they own first. Have a system design so some of the county cost gets taken away as happened with PANGAEA. **Gail:** other piece of the discussion if they were not providing to school may not be any benefit to PANGAEA at that time they want to be able to abandon and not have pole attachment. **Jim:** they want to be able to abandon it and get rid of their agreements. **John:** careful these lines are good, so we can sell these, but we don't want to one we can't make money on and not designing a system for PANGAEA. It is easy to cherry pick and that is why we need to be in this partnership with them. **Tim:** and that puts is back to the unity of management and unity of maintenance. **Gail:** should be a partnership with PANGAEA. **John:** so how do we arrive at that partnership? **Tim:** there are a couple of these strands that are losers except to the school. Like the run to Hollis, there is no there "there". Given the situation now who would want it, will be ever see unity of self interest?? **Jim:** Hollis could be the jumping off place of servicing Cleveland County. **Tim:** that is why I bring this up. I know Gardner Webb has it but Cleveland County does not have it. How would you find where the fiber is? I will get the other organize if we can get this moving forward. This center piece of a regional fiber, when I talk to ENC and Advantage West, they said that is what it is supposed to be. We need to find some unity of self interest. There is obviously going to be some non profitable things that we do.

Gail: What is everyone's thought on owning the fiber versus PANGAEA owning the fiber.

John: After much thought I think PANGAEA should own the fiber. The value is not the ownership of the sheath; the value is in the ownership of the IRUs. **Roger:** there are not any big cons to owning. **Gail:** just the financial stability of PANGAEA is the only con.

Tim: All of our self interest to have PANGAEA as a vital enterprise. With the overall ideal they started this the unity of management gotta be, makes it a whole lot simpler. One throat to choke.

John: How do we determine the ownership of the IRU'S?

Gail: Question for PANGAEA not us.

John: Make sure that we consider all the valuable fiber and some will be useless fiber.

Jim: All or nothing. If you are going to be partners you need to be partners on everything.

Gail: School project we did not get this opportunity, this should be fairly straight forward. Maybe adopt a standard fiber count as we move forward. Did have enough input in the lateral that this would be a good choice for us. Be nice going forward to have a 50/50 arrangement.

Tim: as time goes forward the electronics will grow and so the better the equipment the more the cost. I did talk to some of my contact about multiple IRU, the maintenance costs are going to be paid regardless of ownership, either pay it now or later.

John: we want to have equal benefit on these IRU, currently all the benefit goes to PANGAEA on the school network, so I would like to see equal benefit with this build.

Tim: we are fourteen miles from ERC in McDowell, when we bring McDowell in the mix and 1/3 of queens gap and when we bring another county will the costs be split between counties? Maintenance should be spread out according.

Gail: it depends on whose IRUs they bought within the sheath.

John: I am not thinking on this in terms of making money, but reducing our costs.

Tim: so fixed costs will go to PANGAEA no matter. So we have to decide where the money goes, to solely PANGAEA or the County or do we form a partnership and split it.

John: on the current system, for three years we can't sell our fiber to Queen's Gap, where PANGAEA could. We can only use for governmental use.

Jim: contracts will have to deal with those issues. You have to anticipate.

Tim: interesting

Tim: Has PANGAEA's board discuss regionality in terms of cost.

Jim: clearly trying to get service to I-40 they have discussed, service into Cleveland County, they never tried to put numbers to. I am sure the interest is there.

Kerry: we have been trying to deal with the school project.

Tim: has ONUG started on this extension? On the lateral

Gail: They were in town this week and they have one high school connected and hopefully by the first of January, or everything by the first of January expect sunshine and pinnacle.

Tim: was sunshine and pinnacle included in the

Gail: e-Rate is an issue because they cannot get reimbursement until all is finished. Since we are doing fiber instead of wireless there may be more money from another source to pay for those schools. Julie and Danny talk about getting those done. It would be good to get it

Tim: our critical issue is that we have to get cash flow over into our friends to ONUG and PANGAEA.

GAIL: the money has been wired to ONUG from GL and reimbursement to PANGAEA.

Kerry: we have 67 manufactures that could be potential users around the county and other key property, like corporate 74 is already connected, matheny farm how much will be available along the by-pass for commercial use. Such as ingles if there is construction and then the Duke power upgrade. I got to go through the new data center, Ralph Tallent. He is a wealth of knowledge coming from private sector; they said our incentives are the talk in Raleigh with our project and PANGAEA. They were bragging on Rutherford County. Would it be an interest to have Ralph to sit on this board if he can from a Raleigh stand point? They are checking with Raleigh for his approval to service.

Tim: I too have talked to George, people think Walter Dalton had a lot to do with the data center coming to Rutherford County, and it did help but we had already looked at the area and because we met the criteria for putting the center here. It would be good to have Ralph on the board.

Kerry: they did choose use based on criteria not politics but Walter and Bobby did help to push it along because everyone wanted in their county.

Gail: Do you want me to contact Ron and schedule a meeting after Thanksgiving. We will see what other day would be better for him.

Conversation with Charlie Pittman, E-NC Authority, Gail Strickland, IT Director, Benny Hendrix, RCS IT Director, and Tim Will, Director of Foothills Connect on November 14, 2007.

Charlie: If you extend this fiber now to get to this fiber you have to go through the existing fiber, will that prohibit you from using this new fiber. **Gail:** It could but there would be a new and separate contract. We have a better bargaining position that we did not have before. **Charlie:** Some things that he has been called about, question about Cliffside, they are looking for a provider, the Duke Power plant, they are looking to redevelop that area and have talked to BellSouth with no response and no response from AT&T. They are looking for someone to provide high speed internet voice, data everything. Had thought about FHC dealing with that, how do you get them service in that part of the county. I do agree on giving the sheath to negate the liability, give it to them to extend the IRU, with separate criteria, but use the existing fiber to get to your new fiber, will get you out of the liability and keep you on the same track but not blocked for the three year time. **Gail:** PANGAEA is working directly with ONUG the County is handling the money part of it for the grant. **Charlie:** Wish we could have gotten some of that changed does not like them locking us out of providing services they are reaping a benefit out of it, but they are limiting the counties benefit out of it. If they are willing to do that, tell them we want to utilize a portion of the original contract. Talks about other ways we could have negotiated the contract. **Benny:** let's get back to ownership of the new fibers. **Charlie:** if you don't want to accept the liability, right-of-way, insurance, and the maintenance, then you need to stick with the plan of them owning the sheath except I would set the number of IRUs in there, you control that this time they do not. Another piece in the conversation you don't limit me to what I can serve, now will they agree I don't know. They could say "no we will not build any of this". **Benny:** pros of county owning. **Charlie:** if you own you have to be prepared for the costs (maintenance, pole attachments, etc) you will control it all, if not that determines how we negotiates. **Gail:** John has said the County does not want to be in the fiber business, but not speaking for him. **Charlie:** I would still negotiate more out of this new part. **Tim:** I think we are listening to the voice of wisdom her, my concern is if this entity were to collapse, that someone will be able to pick up and continue to run with it. **Charlie:** you need to have a backup plan in place, should PANGAEA go belly up, Government will not fight you for ownership, I would fight for everything in Rutherford county, I would be looking for a plan to maintain it with ONUG. What will it cost to maintain it? That will give you a guideline. **Tim:** I think that covers all the concerns that I have. **Benny:** Charlie if you have any other thoughts, give us a call. **Charlie:** sorry I don't have more but I have been thinking a lot on this. Tell John to negotiate a little harder. If I can help let me know.

Benny, Danny, Gail, Tim & Julie 2nd meeting on November 14, 2007 immediately following.

Gail: We are making plans to move forwards with the fiber build out; this is exclusive to what is going on with the schools the lateral and all that. We have 1 million for next project 300 thousand is ear mark for the schools. As we move forward do we want to own the sheath or would we be at a better

advantage to have a similar arrangements as the schools where PANGAEA will own the sheath and we will own IRU's in the sheath. **Danny:** One thing with owning you are considered a not for profit entity and will get a better joint use agreement with Duke & Bellsouth which will reduce your operation cost. **Julie:** We are not a 501-3C not for profit. Will this make a difference? **Danny:** I don't think so, when you negotiate they will see you as the government, now who you sale fiber to with the sheath probably will not matter to them. If you are trying to take business away from them they will not like it , but will still give you the government rates, Duke charges PANGAEA somewhere around \$34.00 per pole, but the not for profit prices is probably ½ of that, will save 50% on the pole attachments alone.. **Julie:** will this be an arrangement similar to what PANGAEA would get since they are also not for profit? **Danny:** Duke would not give PANGAEA the not for profit price because they sold an IRU to Duke Net. **Julie:** If county owns and we get the negotiated price and five years down the road we decide we want to sale IRU to someone like Duke Net would we run into problems then. **Danny:** You know I don't think so, but I can't say for sure they don't go back and analyze who you sale fiber to. The county will probably get a government rate, but I will need to check that. This is just one probe of owning it yourself. Your still going to have some of the same expenses as PANGAEA has (such as maintenance, arrangement, pole attachment fees) of coarse pole attachment will be less. The advantage of PANGAEA owning it, you just have the IRU and you pay the maintenance agreement every year. **Gail:** If we did own it how complicated will it be if we own some portion and PANGAEA owns other portions. **Danny:** If you own the Sheath you have control and PANGAEA should not go into the sheath without contacting you, or you could give them a maintenance window. If PANGAEA owns it they will work whenever they want to. **Julie:** Sounds like most of the work is upfront. If you have fiber owned by PANGAEA and fiber owned by County how do we determine where the problem is. **Danny:** School System has point to point fiber circuit, once fiber goes down in sheathe it is a electronic problem. Cable cut 6 schools down we need a reporting mechanism to give up a start for trouble shooting. **Gail:** Maintenance agreement currently does not include electronics. **Benny:** PANGAEA uses SDI networks / AFL and PANGAEA is getting maintenance agreements for the hardware. **Gail:** I am talking about networking monitoring and management. **Benny:** Stu is supposed to be doing network monitoring. **Danny:** Should eventually see a network operation center where the network is monitored all the time. Must have the capability in the equipment you deploy. Cisco equipment can do this to determine if it is electronics or fiber. As county grows you will have DOT requirements, cable rearrangements from time to time. **Benny:** With maintenance agreement can you manage this kind of thing. **Danny:** Yes just call us. **Julie:** Discussion with PANGAEA sounded like county would have complications getting pole attachment since we are new. **Danny:** Not anymore complicated, does take time probably 30 days. **Gail:** We were told it could take up to 6 months. **Tim:** County verses PANGAEA advantages or disadvantages. **Danny:** primary difference is PANGAEA has the agreement in place you will pay the higher rate. **Julie:** RFP for project management and we wanted to own it and the project manager would negotiate the pole attachments would there be a difference in the quotes. **Danny:** No not significant, advantage is that PANGAEA is not experienced. **Gail:** We want a stable system. **Danny:** We can assist you in building out this network. **Julie:** If our fiber is building off fiber that PANGAEA owns and there is a cut we cannot get that repaired. **Danny:** IRU states that you have a certain restoration times. **Gail:** There are some broad time frames. **Danny:** Look at providing diversity; if fiber is cut on PANGAEA network you will still have service. Design

a route that cannot be taken out with one catastrophe. Don't advise speeding all your money up front to provide diverse routes, but some diversity is needed.

Gail: Do you see PANGAEA being receptive to this process. **Danny:** If you can come to an agreement with PANGAEA where you can reduce the operating expenses. We want to see you get the most you can get out of the money you have. **Gail:** We are having weekly meeting to determine the best way to go. **Danny:** Pros & cons for both the real pro will be reduced pole attachment. If you can write an IRU that gives you more control than it might be better to go back through PANGAEA. I don't think you can go wrong either way, just make sure you have the maintenance agreements in place. **Danny:** May want to look at some wireless diversity. Mentioned Mid-Atlantic Broadband. www.mbc-va.com.

Julie: County paid for mobilization of materials and engineering. What was planned was when we turn up the schools each school is paid for. **Danny:** Do not have the bridge loan in place for this due to PANGAEA stating they did not need it. E-rate portion cannot be paid until 100% of the schools are up. **Julie:** You should talk with Kevin and Jeff about the payment issue. **Gail:** sent change order request to PANGAEA. **Danny:** Let me get with Grey, we may have to switch fiber manufacturers, but this should not slow things down. **Julie:** I left things it with Ron and he was supposed to get back with Julie about payments. **Danny:** May have to have a little more money. **Gail:** Is Sunshine & Pinnacle part of E-Rate, but from a different funding stream. **Benny:** will try to get state to release e-rate money to the county to hope fully pay for Sunshine & Pinnacle.

From: Julie Scherer [mailto:Julie.Scherer@rutherfordcountync.gov]
Sent: Friday, July 24, 2009 9:48 AM
To: Michael Kelly
Cc: Rhonda Owens; Peter Gaulin; John Condrey
Subject: Fiber Information for Insurance

Hi Michael,

Below is the information that you stated that you need to give us a quote on fiber coverage.

First, let me say that we are mainly concerned about ice storms, trees falling, etc pulling down fiber and having to pay for re-installation or fiber replacement. In addition, we are concerned with lightning damage. We want to make sure that these types of occurrences are covered.

Description-

The fiber network is approximately 38 miles. The cable is single mode, dielectric, loose tube fiber in various counts. The aerial is strand and lash method with 6m strand and cable id markers at each pole. The buried is in 2 inch conduit with a tracer wire and warning tape 12-18 inches above the conduit. Marker posts are at every Hand Hold and 500 to 600 ft along buried ROW. The network is 85% aerial and 15% buried. The value is \$850,000. It is located in various locations throughout the County.

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THIS ENDORSEMENT CHANGES THE CONTRACT. PLEASE READ IT CAREFULLY.

Participant: Rutherford County
Contract #: LP-RU-080-09
Effective Date: 08/01/2009

This Endorsement modifies PROPERTY COVERAGE (SECTION I):

Adding 38 miles of Fiber Optics Cable located above and below ground in various locations in the County. Value: \$850,000.

All other terms and conditions remain the same.

WA-01/07/10

JOB TITLE: Information Technology Director

IT/1

DEPARTMENT: Information Systems, Rutherford County

JOB SUMMARY: This position is responsible for directing all activities related to information technology and computer functions of the county government.

MAJOR DUTIES:

- o Trains, assigns, supervises, evaluates and disciplines personnel.
- o Identifies and plans technology projects; manages technology projects; develops project teams.
- o Oversees implementation of Strategic Technology Plan.
- o Remains current concerning new information technologies, security issues, communications, and disaster recovery efforts.
- o Serves as IT representative on any technology related task force or management team.
- o Works with county departments to create annual department budgets; compiles and presents technology budgets for departments.
- o Manages and maintains client database for billing and collections.
- o Verifies and submits employee timesheets for payroll; approves and schedules vacation and sick time requests.
- o Evaluates the needs and facilitates the offering of computer training to all employees.
- o Manages maintenance contracts on all hardware and software; gives final approval on all computer hardware and software purchases.
- o Performs other related duties as assigned.

KNOWLEDGE REQUIRED BY THE POSITION:

- o Knowledge of multiple computer operating systems and programs.
- o Knowledge of the principles and techniques of computerized information management, including system design and analysis, programming tools and languages, hardware, software, and network capabilities.
- o Knowledge of trends and standards of the computer industry, and relevant local, state, and federal regulations.

- o Knowledge of relevant county ordinances and department policies and procedures.
- o Skill in troubleshooting and problem solving.
- o Skill in management and supervision.
- o Skill in operating mainframe, mini-, and micro-computers and utilizing related software programs and cable test equipment.
- o Skill in oral and written communication.

SUPERVISORY CONTROLS: The County Manager assigns work in terms of department and county-wide goals and objectives. The work is reviewed through conferences, reports, and observation of department activities.

GUIDELINES: Guidelines include relevant state and federal laws, county ordinances, department policies and procedures, and established standards in the computer information services field. These guidelines require judgment, selection, and interpretation in application.

COMPLEXITY: The work consists of varied administrative and technical duties. Frequently-changing computer technologies and the need to communicate technical information to non-technical personnel contribute to the complexity of the work.

SCOPE AND EFFECT: The purpose of this position is to direct the provision of all computer-related services for the county government. Successful performance helps ensure the efficient and effective provision of computer information services to all county departments.

PERSONAL CONTACTS: Contacts are typically with co-workers, elected officials, department heads, other county employees, vendors, consultants, officials from other governments, and other computer professionals.

PURPOSE OF CONTACTS: Contacts are typically to give and exchange information, resolve problems, negotiate and settle matters, and provide services.

PHYSICAL DEMANDS: The work is typically performed while sitting, standing, or stooping. The employee occasionally lifts light and heavy objects, uses tools or equipment requiring a high degree of dexterity, and must distinguish between shades of color.

WORK ENVIRONMENT: The work is typically performed in an office and a computer room.

SUPERVISORY AND MANAGEMENT RESPONSIBILITY: This position has direct supervision over Information Technology Analyst (3), and PC Support Technician.

MINIMUM QUALIFICATIONS:

- o Knowledge and level of competency commonly associated with the completion of a baccalaureate degree in a course of study related to the occupational field.
- o Experience sufficient to thoroughly understand the diverse objectives and functions of the subunits in the division/department in order to direct and coordinate work within the division/department, usually interpreted to require three to five years of related experience.

JOB TITLE: Senior Information Technology Analyst

DEPARTMENT: Information Technology, Rutherford County

JOB SUMMARY: This position is responsible for designing, developing, implement, programming, evaluating, and maintaining computer systems, programs, and applications in support of county government operations.

MAJOR DUITES:

- Designs systems tools for county operations such as database implementation, web applications, data formats, coding standards and interfaces with other local and external systems; modifies existing applications in accordance with changing technologies and applicable laws and regulations.
- Advises departments pursuant to their request on technology including providing training, software options, outside services, and compatibility issues; ensures that county standard tools are used effectively to accomplish appropriate goals.
- Performs system support duties; researches, evaluates, and recommends computer products and services; tracks technical errors; researches computer viruses and takes appropriate protective measures; negotiates data transfer to new systems; backs up file system data.
- Evaluates new technologies and possible uses; assists with developing and drafting county-wide technology strategies, policies, and procedures (i.e., PC usage, privacy, appropriate Internet use and public access); conducts cost and technical analyses and testing of hardware, software, and entire systems, and makes necessary enhancements pursuant to the need of the department(s) they work with.
- Makes independent decisions regarding software for the department(s) they serve needing final approval from the Department Head for allocation of funds.
- Performs basic installation, administration, trouble shooting, and user support for local and wide area network.
- Available for instruction and guidance for other IT analysts and also departmental IT staff.
- Customizes software applications in-house using available software tools.
- Creates user accounts for new employees; assigns email addresses; creates and deletes passwords; purges accounts and changes access rights as needed.
- Performs daily server back-up.

- Writes programs to convert and load existing mainframe data into new systems.
- Consults with users to define needs and requirements; designs software and writes codes; tests and demonstrates applications and makes modifications according to user feedback.
- Trains and instructs users in hardware and software applications.
- Coordinates hardware and software installations and upgrades with users to ensure minimum downtime.
- Diagnoses and repairs microcomputer failures.
- Designs, develops, and maintains computer information systems in support of county activities.
- Installs and maintains personal computer software and hardware for county computers.
- Prepares reports, graphics, and data structures using computer software.
- Performs other related duties as assigned.

KNOWLEDGE REQUIRED BY THE POSITION:

- Knowledge of computer information systems technology.
- Knowledge of computer programming languages and a variety of high-level and procedural languages.
- Knowledge of various computer operating systems.
- Knowledge of county and department policies and procedures.
- Knowledge of telecommunications systems.
- Knowledge of various word processing, graphic design, spreadsheet, and database software applications.
- Knowledge of microcomputer architecture and hardware compatibility.
- Knowledge of relevant federal and state laws, rules, and regulations.

- Knowledge of Internet and worldwide web protocols and procedures.
- Skill in installing and maintaining networking hardware.
- Skill in installing, configuring, and maintaining client/server databases, routers, firewalls, and e-mail systems.
- Skill in training and providing technical assistance.
- Skill in analyzing and interpreting technical data.
- Skill in utilizing a variety of programming software.
- Skill in oral and written communication.

SUPERVISORY CONTROLS: The Information Technology Director assigns work in terms of general instructions. Completed work is spot-checked for compliance with procedures, accuracy, and the nature and propriety of the final results.

GUIDELINES: Guidelines include Internet protocols and technical standards, hardware and software manuals, relevant federal and state laws and regulations, department and county policies and procedures, and computer system documentation and instructions. These guidelines require judgment, selection, and interpretation in application.

COMPLEXITY: The work consists of varied technical information system duties. The number and diversity of tasks, the amount of necessary technical knowledge required, and the need for accuracy and expediency contribute to the complexity of the work.

SCOPE AND EFFECT: The purpose of this position is to maintain computer information systems and applications for the county. Successful performance results in accurate, easily accessible, and timely information, which contributes to overall county goals.

PERSONAL CONTACTS: Contacts are typically with computer consultants, sales representatives, programmers, technical support engineers, co-workers, other county employees, and the general public.

PURPOSE OF CONTACTS: Contacts are typically to give or exchange information, provide services, and resolve problems.

PHYSICAL DEMANDS: The work is typically performed while sitting at a desk or table, with intermittent standing, stooping, bending, crouching, or walking. The employee

Senior Information Technology Analyst
Page 4

frequently lifts light or heavy objects, climbs ladders, uses equipment requiring a high degree of dexterity, and must distinguish between shades of color.

WORK ENVIRONMENT: The work is typically performed in an office, computer room, offsite at the departments they serve and other county facilities.

SUPERVISORY AND MANAGEMENT RESPONSIBILITY: None.

MINIMUM QUALIFICATIONS:

- Knowledge and level of competency commonly associated with the completion of a baccalaureate degree in a course of study related to the occupational field.
- Sufficient experience to understand the advanced principles relevant to the major duties of the position, usually associated with the completion of an apprenticeship/internship or having had a similar position for three to five years.

(1)

JOB TITLE: Information Technology Analyst

IT/2

DEPARTMENT: Information Technology, Rutherford County

JOB SUMMARY: This position is responsible for designing, developing, implementing, programming, evaluating, and maintaining computer systems, programs and applications in support of county government operations. An incumbent in this position may be designated Senior Information Technology Analyst.

MAJOR DUTIES:

- o Designs systems tools for county operations such as database implementation, web applications, data formats, coding standards and interfaces with other local and external systems; modifies existing applications in accordance with changing technologies and applicable laws and regulations.
- o Advises departments pursuant to their request on technology including providing training, software options, outside services, and compatibility issues; ensures that county standard tools are used effectively to accomplish appropriate goals.
- o Performs system support duties: researches, evaluates, and recommends computer products and services; tracks technical errors; researches computer viruses and takes appropriate protective measures; negotiates data transfer to new systems; backs up file system data.
- o Evaluates new technologies and possible uses; assists with developing and drafting county-wide technology strategies, policies, and procedures (i.e., PC usage, privacy, appropriate Internet use and public access); conducts cost and technical analyses and testing of hardware, software, and entire systems.
- o Performs basic installation, administration, trouble shooting, and user support for local and wide area network.
- o Customizes software applications in-house using available software tools.
- o Creates user accounts for new employees; assigns email addresses; creates and deletes passwords; purges accounts and changes access rights as needed.
- o Performs daily server back-up.
- o Writes programs to convert and load existing mainframe data into new systems.
- o Consults with users to define needs and requirements; designs software and writes codes; tests and demonstrates applications and makes modifications according to user feedback.

- o Trains and instructs users in hardware and software applications.
- o Coordinates hardware and software installations and upgrades with users to ensure minimum downtime.
- o Diagnoses and repairs microcomputer failures.
- o Designs, develops, and maintains computer information systems in support of county activities.
- o Installs and maintains personal computer software and hardware for county computers.
- o Prepares reports, graphics, and data structures using computer software.
- o Performs other related duties as assigned.

KNOWLEDGE REQUIRED BY THE POSITION:

- o Knowledge of computer information systems technology.
- o Knowledge of computer programming languages and a variety of high-level and procedural languages.
- o Knowledge of various computer operating systems.
- o Knowledge of county and department policies and procedures.
- o Knowledge of telecommunications systems.
- o Knowledge of various word processing, graphic design, spreadsheet, and database software applications.
- o Knowledge of microcomputer architecture and hardware compatibility.
- o Knowledge of relevant federal and state laws, rules, and regulations.
- o Knowledge of Internet and worldwide web protocols and procedures.
- o Skill in installing and maintaining networking hardware.
- o Skill in installing, configuring, and maintaining client/server databases, routers, firewalls, and e-mail systems.

- o Skill in training and providing technical assistance.
- o Skill in analyzing and interpreting technical data.
- o Skill in utilizing a variety of programming software.
- o Skill in oral and written communication.

SUPERVISORY CONTROLS: The Information Technology Director assigns work in terms of very general instructions. Completed work is spot-checked for compliance with procedures, and the nature and propriety of the final results.

GUIDELINES: Guidelines include Internet protocols and technical standards, hardware and software manuals, relevant federal and state laws and regulations, department and county policies and procedures, and computer system documentation and instructions. These guidelines require judgment, selection, and interpretation in application.

COMPLEXITY: The work consists of varied technical information system duties. The number and diversity of tasks, the amount of necessary technical knowledge required, and the need for accuracy and expediency contribute to the complexity of the work.

SCOPE AND EFFECT: The purpose of this position is to maintain computer information systems and applications for the county. Successful performance results in accurate, easily accessible, and timely information, which contributes to overall county goals.

PERSONAL CONTACTS: Contacts are typically with computer consultants, sales representatives, programmers, technical support engineers, co-workers, other county employees, and the general public.

PURPOSE OF CONTACTS: Contacts are typically to give or exchange information, provide services, and resolve problems.

PHYSICAL DEMANDS: The work is typically performed while sitting at a desk or table, with intermittent standing, bending, crouching, or stooping. The employee frequently lifts light and heavy objects, uses equipment requiring a high degree of dexterity, and must distinguish between shades of color.

WORK ENVIRONMENT: The work is typically performed in an office or computer room.

SUPERVISORY AND MANAGEMENT RESPONSIBILITY: None.

MINIMUM QUALIFICATIONS:

- o Knowledge and level of competency commonly associated with the completion of a baccalaureate degree in a course of study related to the occupational field.
- o Sufficient experience to understand the basic principles relevant to the major duties of the position, usually associated with the completion of an apprenticeship/internship or having had a similar position for one to two years.

(1)

TITLE: IT Imaging Specialist

DEPARTMENT: Information Technology, Rutherford County

JOB SUMMARY: This position is responsible for providing, developing, implement and the management of a county wide image system.

MAJOR DUITES:

- Assists in developing or selecting systematic method of imaging archived and current records for county departments.
- Gathers, sorts and prepares documents for images that are archived or for current records.
- Assists in selecting and/or developing a tracking system for imaged records.
- Works with staff in defining current and future imaging needs and communicates needs to departmental staff as they develop department imaging budgets.
- Troubleshoots, repairs or call for repairs with imaging equipment.
- Works with County Departments regarding confidentiality and scheduling imaging services consistent with Department needs and requirements.
- Trains departmental staff in use of selected imaging system.
- Performs other related duties as assigned.

KNOWLEDGE REQUIRED BY THE POSITION:

- Knowledge of computer information systems technology, including server operating systems and networking protocols, and network design.
- Knowledge of imaging techniques and procedures.
- Knowledge of county and department policies and procedures.
- Knowledge of various word processing, graphic design, spreadsheet, and database software applications.
- Knowledge of Internet and worldwide web protocols and procedures.
- Skill providing technical assistance.
- Skill in analyzing and interpreting technical data.

IT Imaging Specialist, Information Technology
Page 2

- o Skill in maintaining imaging hardware.
- o Skill in oral and written communication.

SUPERVISORY CONTROLS: The Information Technology Director assigns work in terms of general instructions. Completed work is spot-checked for compliance with procedures, accuracy, and the nature and propriety of the final results.

GUIDELINES: Guidelines include product manuals and department and county policies and procedures. These guidelines are generally clear and specific, but may require some interpretation in application.

COMPLEXITY: The work consists of related technical computer and imaging system duties. The number and diversity of tasks performed and constantly-changing technologies contribute to the complexity of the work.

SCOPE AND EFFECT: The purpose of this position is to provide support to county departments regarding records storage maintenance. Successful performance results in access to information necessary for county government operations and security of the county's computer network.

PERSONAL CONTACTS: Contacts are typically with imaging consultants, vendors, technical support engineers, co-workers, and other county employees.

PURPOSE OF CONTACTS: Contacts are typically to give or exchange information, provide services, and resolve problems.

PHYSICAL DEMANDS: The work is typically performed while sitting at a desk or table, with intermittent standing, stooping, bending, crouching, or walking. The employee frequently lifts light or heavy objects, climbs ladders, uses equipment requiring a high degree of dexterity, and must distinguish between shades of color.

WORK ENVIRONMENT: The work is typically performed in an office or computer room.

SUPERVISORY AND MANAGEMENT RESPONSIBILITY: None.

PANGAEA INTERNET

Memorandum of Understanding

Network Management, Operations and Maintenance for Rutherford County

Effective Date: August 17, 2009

This Memorandum of Understanding ("MOU") summarizes and sets forth certain terms and conditions of one or more planned final agreements between E-POLK, INC., d/b/a PANGAEA Internet ("PANGAEA") and RUTHERFORD COUNTY, NC ("County") whereby the County will sell certain multi-strand fiber optic cable to PANGAEA, PANGAEA will grant an indefeasible right to use ("IRU") such strands to the County, and PANGAEA will provide network management, network operations and network maintenance services to the County. This MOU confirms the parties' mutual understanding and intention to negotiate in good faith to enter into a mutually agreeable definitive agreement (the "Definitive Agreement") among the parties hereto that reflect the terms outlined herein.

1. Description

Upon the Transfer Date (as defined in section 9 below), the County will sell and PANGAEA will purchase all of the multi-strand fiber optic cable included in the Public Safety Fiber Network described and defined in Attachment A hereto (the "County Network") for the purchase price of \$1.00. PANGAEA will then immediately grant an IRU in the County Network to the County for \$1.00 and PANGAEA will immediately begin managing, operating and maintaining the County Network under the terms and conditions of this MOU and the Definitive Agreement. Service provided by PANGAEA will be provided in a manner that is consistent with usual and customary industry practices and that is equal to similar services provided to other PANGAEA customers and services used to manage PANGAEA's own network. The terms of this MOU and the Definitive Agreement are limited to the County Network fiber network only, and do not relate to or include any other network or customer equipment not owned by PANGAEA.

2. Scope of Work:

PANGAEA will incorporate the County Network and associated support functions, into its day to day operations. PANGAEA will provide the services listed in Attachment C which shall include the following:

- a. Insurance: PANGAEA will include coverage for the County Network, and associated support functions, in all PANGAEA insurance policies. Insurance coverage will include Workers Compensation, Property and Liability, Directors and Officers Liability and Umbrella Liability insurance. Copies of insurance policies will be provided to the County.

PANGAEA INTERNET

- b. Pole Attachments: PANGAEA will add all poles associated with the County Network to PANGAEA's existing applicable pole attachment agreements.
- c. Maintenance: PANGAEA will maintain the fiber, connectors, and any other PANGAEA owned assets utilized to operate the County Network. This will include meeting all obligations included in PANGAEA's Service Level Agreement ("SLA") dated February 11, 2009 and attached as Attachment B. PANGAEA's total liability for maintenance and repair expense, including any extraordinary repair caused by any reason, shall be limited to \$20,000 per each 12 month period. The first 12 month period of maintenance will begin on the transfer date. Amounts in excess of \$20,000 will be allocated between the parties based upon fiber strand miles as defined in Attachment A.
- d. Administration: PANGAEA will include the County Network in all PANGAEA administrative and professional services functions. Administrative functions include, but are not limited to, office space, supplies, postage, printing/copying, furniture, office equipment and telephone. Professional services functions include, but are not limited to, tax and corporate accounting, contract management and administration, and web site maintenance and development. PANGAEA will complete monthly, quarterly, and annual reporting to meet the requirements of all federal and state government agencies. However, the County will be responsible for all grant reporting for the project including, but not limited to, the requirements of the Golden LEAF Foundation and if required to the North Carolina State Auditor...
- e. Operations: PANGAEA will perform operations management functions to address day to day planning, maintenance, and operational issues related to the County Network. PANGAEA's personnel will serve as the initial and primary technical point of contact for the County and any third party associated with the County Network. PANGAEA will track and document all network data including fiber assignment and fiber splicing data. PANGAEA will manage staffing requirements at a level that meets or exceeds all SLA metrics.

On the Transfer Date, the County will provide PANGAEA one (1) paper copy and one (1) electronic copy of "as-built" fiber maps for the County Network, including clearly marked locations of all underground and above ground fiber.

3. Change Orders

Upon agreement by PANGAEA and the County, Attachment A will be amended to add or remove fiber or locations. Upon the effective date of the revision, all pricing will adjusted as described in Section 5 and Section 6.

PANGAEA INTERNET

4 Excluded Services

Services excluded from this Agreement include, but are not limited to, any service prior to the Transfer Date; operating, maintaining or repairing any asset not owned by PANGAEA; or support to any customer not purchasing PANGAEA service. Also excluded is bandwidth or transport provided by PANGAEA to the County or any other customer.

5 Pricing

Within Project Scope:

- a. The monthly cost of the services described in Section 2(a), 2(c), 2(d), 2(e) of this Agreement will be \$127.50 per month per fiber mile.
- b. The County agrees to reimburse PANGAEA semi-annually for all pole attachment lease and maintenance fees described in Section 2(b) including make ready and survey costs associated with the County Network and charged to PANGAEA by the pole owners.

Outside Project Scope: The fees for any work done outside of the scope described in Section 2 will be negotiated between the parties, including an hourly rate for personnel costs.

6 Pricing Adjustments

- a. If PANGAEA determines that it has a business reason to utilize one or more fiber strands included in the County Network, upon approval from the County and with the express written consent of the County, the IRU lease will be canceled on such specific fiber strand(s) and fiber route(s). PANGAEA will then assume full responsibility for all costs covered by this Agreement for such specific fiber strand(s) and fiber route(s). The future monthly costs included in Section 5(a) and future semi-annual costs included in Section 5(b) will then be reduced by a prorated amount. The reduction will be calculated based upon the number of leased fiber strand miles canceled compared to the original total leased fiber strand miles for the completed County Network as defined in Attachment A. For example, if the total leased fiber strand miles included in the County Network equals 100 and the IRU lease is canceled for 5 fiber strand miles, then the future cost reduction will equal 5%. If an IRU is subsequently canceled for 2 additional leased fiber strand miles, an additional 2% cost reduction adjustment will be applied to the future cost.
- b. If fiber is added to or removed from the County Network as described in Section 3, all future monthly costs included in Section 5(a) and future semi-annual costs included in Section 5(b) will then be increased (if fiber is added) or decreased (if fiber is removed) by a prorated amount. The prorated adjustment will be calculated by the process described in Section 6 (a).

PANGAEA INTERNET

- c. For all pricing adjustment calculations, leased fiber strand miles of the County Network will be calculated by multiplying the number of fiber strands in the fiber sheath times the number of route miles as specified in PANGAEA's fiber inventory database.

7. Payments

- a. Payments for costs included in Section 5(a) will be due monthly. PANGAEA will invoice in advance on the first of each month for that month's service. For example, an invoice dated January 1 will cover the service period of January 1-31.
- b. Payments for costs included in Section 5(b) will be invoiced by PANGAEA semi-annually. PANGAEA will not invoice the County until PANGAEA is invoiced by the pole owners.
- c. Payments for all services provided under Section 5 are due 30 days after the invoice date. Late payments will incur a 1.5% per month late payment fee.

8. Revenue Sharing

- a. If PANGAEA uses one or more fiber strands as described in Section 6(a) to provide service to a customer, PANGAEA agrees to share with the County 10% of all future monthly service gross revenue collected from that customer. PANGAEA will pay the County semi-annually an amount that represents the total gross revenue sharing amount for all collected customer gross revenue for the prior six month period. PANGAEA shall not use any fiber strands described in Attachment A without the express written consent of the County.
- b. If a third party agrees to purchase fiber IRU's on PANGAEA's network and the IRU includes fiber included in the County Network, PANGAEA agrees to share any IRU payment with the County. PANGAEA shall not sell any fiber IRU's for fiber strands described in Attachment A without the express written consent of the County. The County's pro rata share will equal the percentage of fiber strand miles included in Attachment A compared to the total fiber strand miles provided to the third party. For example, if a third party purchases an IRU on 10 fiber strand miles for \$100,000 with 5 of those 10 fiber strand miles included in the fiber strand miles in Attachment A, the County would receive \$50,000.

9. Effective Date for MOU and the Transfer Date

The effective date of this MOU is the date written at the top of the first page of this MOU (the "Effective Date"). The "Transfer Date" is the date that the County Network is complete and the County signs a fiber acceptance notice(s) that represents acceptance and transfer to PANGAEA of 100% of the fiber included in the County Network.

PANGAEA INTERNET

10. Term of Service

The initial term for the service provided by PANGAEA shall commence on the Transfer Date and end on November 5, 2010. After the initial term, the service contract will automatically be renewed on a month-to-month basis unless cancelled as described in Section 11.

11. Cancellation of Service Contract

If the County cancels the service contract during the initial service term, the cancellation penalty will equal 50% of all remaining monthly and semi-annual fees described in Section 5. The cancellation penalty will not apply if the cancellation is due to PANGAEA's recurring failure to meet the service parameters described in the PANGAEA SLA (Attachment B) or if PANGAEA fails to meet the Section 2 requirements of this Agreement. After the initial term, PANGAEA or the County may cancel the service contract for any reason with 90 days advance written notice provided to the other party. Upon cancellation, PANGAEA will sell ownership of 100% of all fiber strands associated with the County Network to the County for \$1.00. For the useful life of the County Network fiber, PANGAEA will have the option to continue to utilize any or all fiber strands associated with IRU lease cancellations as described in Section 6 and PANGAEA will pay the County a prorated share of the future monthly cost based upon the pricing as described in Section 5 and proration formula described in Section 6. PANGAEA will provide the County with all network information in its possession regarding the fiber strands sold back to the County including but not limited to fiber allocations and mapping, pole attachment data, and splicing data.

12. Transfer in the Event of Cessation of Business

Subject to the provisions of applicable law and compliance with PANGAEA's Articles of Incorporation, in the event that PANGAEA shall cease doing business, full ownership of all IRU Fibers listed in Attachment A shall transfer automatically to the County without payment of additional consideration.

13. Term Termination

This MOU shall be effective on the Effective Date and shall expire upon the effective date of the Definitive Agreement, or the written mutual consent of the parties hereof. The parties agree to be bound by the terms and conditions of this MOU until such as time as the Definitive Agreement is executed, provided that the Definitive Agreement is executed on or before November 2, 2009. In the event that one party breaches the terms and conditions of this MOU, the other party may at its option terminate the MOU.

14. Authorization

PANGAEA INTERNET

The parties hereto hereby agree to the terms and conditions contained in this MOU.

RUTHERFORD COUNTY

John W. Condey Signature
John W. Condey Printed Name
County Manager Printed Title
8-18-09 Date

PANGAEA

Bon Walters Signature
Bon Walters Printed Name
Executive Director Printed Title
8-25-09 Date

PANGAEA INTERNET

ATTACHMENT A

Estimated Fiber Distances

Route mi.	Location	Address	From Point	Fiber count
0.10	Bostic EMS	207 N Main St	Street to EMS Bldg with lateral pulled thru to fire sta.	12F
0.10	Bostic Station	181 N Main St	See Above	12F
0.10	Ellenboro Station	175 Depot St	Street	14F
0.75	Forest City Station	186 S Church St	Broadway Street (.25 mi. from Main St.)	12F
0.10	Hudlow Station	2910 Hudlow Road	Street	12F
0.10	Sandy Mush Station	557 US Hwy 221A	Street	12F
0.10	Danieltown SDO Station	115 Toms Lake Road	Street	12F
0.50	Rutherfordton Station	144 N Mitchell St	Street	12F
0.20	Spindale Station	103 Reveley St	Street	12F
2.30	Cherry Mountain Station	5841 Bostic Sunshine Hwy	Intersection of Toney Rd and Bostic Sunshine Hwy.	72F
1.30	Cliffside Station	4600 US Hwy 221A	Cliffside Elementary	48F
3.20	Union Mills Station	6791 Hudlow Rd	Gilkey School / Painters Gap Intersection	72F
6.18	Green Hill	2711 US Hwy 64/74A	RC Comm Center	144F
5.00	Shingle Hollow Station	2621 Cove Road	Green Hill	24F
7.70	Hickory Nut Gorge EMS\Library	Intersection of 64/74 & Billis Creek Rd.	Green Hill	144F
1.80	Bills Creek Station	1118 Bills Creek Rd	Hickory Nut Gorge EMS\Library	24F
1.90	Fairfield Station	1415 Buffalo Creek Rd	Bills Creek Station	24F
1.90	Lake Lure Town Station	622 Memorial Highway	Hickory Nut Gorge EMS\Library	24F
5.40	Chimney Rock Station	109 Terrace Dr	Lake Lure Fire Station	24F

38.73 Total Mileage

PANGAEA INTERNET

ATTACHMENT B

PANGAEA Service Level Agreement February 11, 2009

1. ***Service Levels***

Installation: PANGAEA will exercise commercially reasonable efforts to install any PANGAEA service on or before the Customer Commit Date. This installation service level does not apply to Customer Orders that contain incorrect information supplied by Customer or Customer Orders that are altered at Customer's request after submission and acceptance by PANGAEA. In the event PANGAEA does not meet this Installation Service Level for a particular PANGAEA service for reasons other than an Excused Outage, Customer will be entitled to a service credit for each day of delay equal to the charges for one (1) day of the allocated monthly recurring cost for the affected service, up to a monthly maximum credit of ten (10) days.

Network Availability: PANGAEA's goal is to maintain 100% network availability and PANGAEA commits to maintain an average monthly availability of greater than 98.5%. Network downtime will exist when Customer is unable to transmit or receive data over the PANGAEA network. Network downtime is measured from the time the PANGAEA Operations Director becomes aware of the downtime to the time Customer can again transmit and receive data. When the per occurrence downtime is greater than four hours, Customer is entitled to a service credit for that occurrence. That credit will equal 1/30 of the total monthly recurring cost for each hour of network outage in excess of four hours.

Mean Time to Repair: PANGAEA's goal is to deliver a Mean Time to Repair of four hours from the first report of trouble. Mean Time to Repair is measured based on the total time it takes to restore service interruptions. Customer will be entitled to a service credit equal to 10% of the total monthly recurring cost paid by Customer during the calendar month in which the Mean Time to Repair goal is not met. This calculation will average all service outages for the month.

Maintenance: PANGAEA or designee will provide seven (7) days notice of any scheduled network maintenance activities. Eight (8) hours notice will be provided for items that require network maintenance and cannot wait until the normal maintenance window. PANGAEA or designee will perform maintenance activities between 9 PM and 6 AM unless otherwise required.

Support/Monitoring: PANGAEA or partner designee will be available 24/7 for monitoring, support and repair. PANGAEA's Operations Director will be the point of contact for all service related issues. An escalation list is provided in this document. All PANGAEA network equipment is monitored 24/7 so that the Operations Director will be notified immediately of any outages or other problems.

Restoration: Personnel will be on site for emergency unscheduled maintenance within four hours of becoming aware of an event.

PANGAEA INTERNET

2. Customer Responsibilities

The Customer will provide surge protected power and sufficient computer room space for all equipment needed to interconnect with the PANGAEA network. PANGAEA or designee and Customer will work together to identify any network issues that do not have a clearly defined responsible party. The cost of catastrophic repairs will be shared among customers on a pro-rata basis based upon strand count in the impacted sheath. Although rare, service interruptions do occur. Therefore, PANGAEA recommends that the Customer maintains a backup service.

3. Excused Outages

PANGAEA will not be responsible for outages caused by Customer neglect, equipment not owned or controlled by PANGAEA, catastrophic damages, or instances of Force Majeure.

4. Credit Exceptions

In the event Customer is entitled to multiple credits arising from the same event, the credits will not be cumulative and Customer will receive the maximum single credit available for that event.

5. Limits of Liability

PANGAEA's total maximum liability per event is equivalent to one month's recurring cost for the PANGAEA service.

6. Escalation List

1st Level

Stu Davidson (Operations Director)

Cell: 828-817-2919
Emergency Only: 864-457-5239
stu@e-polk.org or davidsons@charter.net (home)

2nd Level

Ron Walters (Executive Director)

Cell: 828-817-0863
Emergency Only: 864-877-5658
ronw@e-polk.org

3rd Level

Jeff Byrd (President - Board of Directors)

Office: 828- 859-2737 x106
Cell: 828- 817-0012
jbyrd@tryondailybulletin.com

PANGAEA INTERNET

ATTACHMENT C

Rutherford County Public Safety Fiber Network August 13, 2009

Job Functions Provided By PANGAEA Internet Personnel:

- Insurance Policy Analysis and Management
 - Property and Business Liability
 - Workers Compensation
 - Umbrella Liability
 - Directors and Officers Liability
 - Smartnet - Columbus
 - Smartnet – Rutherfordton

- Pole Attachment Contract Negotiation, Analysis and Management
 - AT&T
 - Northland Cable
 - REMC
 - Duke Energy

- Network Operations (includes PANGAEA owned fiber optic cable, network equipment, power equipment, connectors and monitoring equipment – excludes any functions related to customer specific lateral fiber drops or customer equipment.)
 - Network Planning
 - Diversity/Survivability Analysis/Planning
 - Fiber Demand and Growth Strategy
 - Fiber Route Analysis
 - Network Mapping
 - Fiber Routes
 - Fiber Allocations
 - Diversity/Survivability
 - Engineering
 - Traffic Routing and Usage Evaluation
 - Network Performance Evaluation
 - Maintenance
 - Fiber Inspection/Evaluation (Quarterly)
 - Equipment Evaluation and Upgrades
 - Repair
 - 24X7 On Call
 - Meet All SLA/QoS Requirements
 - Outage Notifications
 - Network Vendor Management

PANGAEA INTERNET

- IP Consultants
- Equipment
- Fiber
- Smartnet
- Installation

- Regulatory Affairs and Reporting
 - FCC Form 499Q
 - FCC Form 499A
 - FCC CPNI Filing
 - NCLC Form RF
 - FCC Form 477
 - USACJeRate

- Financial Reporting
 - NC-5
 - IRS 941
 - NC3M
 - 1096/1099
 - W-2/W-3
 - NC E-585
 - IRS 990
 - NC E-500

- Public Advocacy and Relations

- Business Planning

- Budget Development, Tracking and Management

- Business Contract Negotiation and Relationship Management
 - CPA
 - Legal
 - Rutherford County Government
 - Polk County Government
 - Rutherford County Schools
 - Polk County Schools
 - DukeNet Communications
 - Foothills Connect
 - Town of Rutherfordton
 - Town of Forest City
 - Carolina Cable
 - ITS
 - MCNC

- Pricing and Product Strategy
 - Bandwidth

PANGAEA INTERNET

- Transport
- Administration
 - Office Management
 - Rent
 - Supplies
 - Postage
 - Printing/Copying
 - Furniture
 - Equipment
 - Telephone
 - Employee Management
 - Hiring
 - Evaluations
 - Training
 - Payroll
 - W-2
 - 1099
 - Professional Services
 - Bookkeeping
 - Accounts Payable
 - Accounts Receivable
 - Collections
 - Invoicing
 - Accruals
 - End of Period Reports
 - Tax Accounting
 - Legal
 - Network (IP) Consulting