

**MINUTES
of the
THIRD MEETING
of the
SCIENCE, TECHNOLOGY AND TELECOMMUNICATIONS COMMITTEE**

**August 22-23, 2016
Kit Carson Electric Cooperative Board Room
Taos**

The third meeting of the Science, Technology and Telecommunications Committee (STTC) was called to order by Senator Michael Padilla, chair, on August 22, 2016 at 10:09 a.m. at the Kit Carson Electric Cooperative Board Room in Taos.

Present

Sen. Michael Padilla, Chair
Rep. James E. Smith, Vice Chair
Sen. William F. Burt
Rep. Stephanie Garcia Richard (8/22)
Rep. Conrad James
Rep. Bill McCamley
Rep. Debbie A. Rodella
Rep. John L. Zimmerman

Absent

Rep. Jason C. Harper
Sen. Daniel A. Ivey-Soto
Sen. Bill B. O'Neill
Sen. John C. Ryan
Rep. Carl Trujillo

Advisory Members

Sen. Carlos R. Cisneros
Rep. Kelly K. Fajardo
Sen. Richard C. Martinez
Sen. Nancy Rodriguez (8/23)
Rep. Monica Youngblood (8/23)

Sen. Jacob R. Candelaria
Sen. Ron Griggs
Rep. Antonio Maestas
Sen. Steven P. Neville
Sen. Mary Kay Papen
Sen. William H. Payne
Rep. Nick L. Salazar
Rep. Luciano "Lucky" Varela
Sen. Peter Wirth

(Attendance dates are noted for those members not present for the entire meeting.)

Guest Legislators

Rep. Alonzo Baldonado
Rep. Roberto "Bobby" J. Gonzales

Staff

Gordon Meeks, Legislative Council Service (LCS)
Shawna Casebier, LCS
Ralph Vincent, LCS

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written testimony are in the meeting file.

Monday, August 22**Welcome and Introductions**

Senator Padilla welcomed the committee to the third meeting of the STTC for the 2016 interim and thanked Kit Carson Electric Cooperative for hosting the committee and Representative Gonzales for inviting the committee to meet in Taos and for organizing a dinner reception for the evening. Members of the committee and the staff were invited to introduce themselves.

Welcome to Kit Carson Electric Cooperative and to Taos

Bobby Ortega, president of the board of trustees of Kit Carson Electric Cooperative, welcomed the committee. He explained that Kit Carson is proud to have brought high-speed internet access to all rural areas in Taos, Colfax and Rio Arriba counties. He then introduced other board members in the audience.

Kit Carson Electric Cooperative Broadband Deployment

Luis A. Reyes, general manager of Kit Carson, introduced Gabriel Montoya of the Pueblo of Pojoaque, who summarized some recent changes to the management of REDI Net, the regional internet cooperative that is providing fiber-optic cable access to high-speed internet services for institutions in northern New Mexico.

Mr. Reyes summarized Kit Carson Electric Cooperative's success with partnerships on rural broadband. He said that most of state's geographic area is served by electric cooperatives. In addition to electricity, Kit Carson has embarked on a proactive mission to help its rural service area to achieve economic development by expanding beyond its primary 30,000-customer base for electric service to include propane service to 3,500 customers and 4,000 internet customers. He said that Kit Carson has the largest solar fleet in New Mexico and is number two in the country for watts per customer from solar power. The cooperative has aggressive plans for the future following a 2011 award for its achievements, including the goal of deploying fiber optics to all homes and businesses in its service area. It currently has 90% of the network lit and 100% built. Its basic package provides for 30 megabits upload rate and 30 down. The system will have the capacity to scale up, he said. He said that high-speed internet access is most critical for economic development in rural areas because it is a critical ingredient to attract tourism, retirement relocation and work during vacation.

He said that Kit Carson's program provides an economic development model that can be replicated in rural areas around the state, as well as in some small urban settings. Grid

modernization is important for all utilities, and Kit Carson is working with Los Alamos National Laboratory and Sandia National Laboratories to gather data to formulate plans for optimum energy efficiency and system reliability.

In response to a question from the committee, Mr. Reyes said that Kit Carson is working with CenturyLink to deploy redundant paths, as well as with REDI Net and an unnamed telephone cooperative in southern Colorado. He said the cooperative is also working with La Jicarita Rural Telephone Cooperative in Mora to provide access lines to Las Vegas, New Mexico. He said that the cooperative first rolled out internet service to rural areas and then extended service into Taos and other more urban centers in its service area.

Mr. Montoya explained that an audit of REDI Net led to a change in the organization's fiscal management with Rio Arriba County, which is now acting as fiscal agent. He said that networks like REDI Net will only survive with partnerships. He said that since October 2015, the organization has been in hibernation mode. During this time, the board looked at all services, what is being contracted out and what should be done internally and decided to change its fiscal management. The board also changed and has new blood. It includes four tribal entities, one county and one city. Easements have been signed for 25 years to provide network expansion. Educational institutions are its priority for service, and it is connecting schools and public safety centers first. REDI Net is a middle-mile provider and cannot build to the home, but it can work with others to get lower costs for customers, he explained.

REDI Net is a very strong middle-mile provider, and it is also partnering with Jemez Mountains Electric Cooperative, which has all fiber on its poles. He explained that rural areas are hard to build in, and right-of-way access is expensive and slow for return on investment, so it is crucial that REDI Net partner with a variety of organizations for leverage of its resources. REDI Net is planning for redundancy. It is also working with tribes and last-mile providers to build a stronger network.

Margaret Campos, Public Education Department, said that everything the REDI Net board is doing is intended to make REDI Net sustainable for the future. It is partnering with higher education institutions, such as Northern New Mexico College and Luna Community College, and is hoping to support a pipeline for information technology (IT) technicians to receive certification in all high schools and to smooth matriculating credits through to completion of bachelor's degrees into internships and mentorships in hopes of building capacity and uniting communities.

Mr. Reyes closed the presentation by saying the electric cooperatives adopted rural broadband as an initiative because it complements the core service of a membership electric utility cooperative. Kit Carson now has 4,000 members connected to internet service and 13,000 in line.

Katherine Martinez, lobbyist for CenturyLink, expressed appreciation to Kit Carson Electric Cooperative for partnering with CenturyLink and pointed out that CenturyLink serves more rural customers than all other providers.

Committee members queried the presenters and commented about the following:

- the Questa mine closure resulted in the loss of 350 area jobs, and the cooperative's service needed to replace those;
- the shift from Tri-State Generation and Transmission Association (an interstate cooperative) to an independent power provider;
- the 10-year contract with Tri-State required \$37 million to exit, but Kit Carson member rates will actually fall in 5.5 years, and the cooperative will save, over 10 years, \$50 to \$70 million;
- the history of the cooperative getting into the propane business;
- the source of REDI Net's investment was from the federal government under the federal American Recovery and Reinvestment Act of 2009 (ARRA);
- Native American governments' acquisition of land, and right-of-way issues being raised, as tribes raise right-of-way costs;
- the need to attract out-of-state high-technology companies dependent on high-speed internet;
- the growth of Santa Teresa and its impact on the rest of New Mexico;
- potential new funds other than through ARRA for high-speed deployment;
- student enrollment at Taos High School;
- Enron's plans to expand retail wheeling into Kit Carson's service area as the original rationale for Kit Carson Electric Cooperative providing internet services;
- franchise agreements;
- service to schools in smaller communities;
- challenges with internet service providers;
- installation of fiber in existing water conveyance systems;
- trust land restrictions on Indian nations, tribes and pueblos;
- the federal Rural Utilities Service (RUS) as a source of funds for broadband investments;
- the average member pays \$39.95 for basic service; and
- the community dedication of Kit Carson board members.

Approval of Minutes

The minutes of the July meeting were approved.

Department of Information Technology Project Spreadsheet Update

Darryl Ackley, secretary of information technology, introduced Deputy Secretary Estevan J. Lujan and General Counsel Maria Sanchez and told the committee that not much has changed on the spreadsheet data since the July meeting. He distributed a portfolio management list and announced that the Information Technology Commission had met. Secretary Ackley said that the

department is working diligently with the Department of Finance and Administration's Local Government Division on Department of Public Safety issues.

Discussion from the committee addressed:

- progress on the secretary of state's online voter registration system and its estimated costs compared to actual costs;
- the status of the Computer Systems Enhancement Fund;
- the Children, Youth and Families Department IT budget;
- the membership of the Information Technology Commission; and
- the replacement of the Motor Vehicle Division's system.

One-Stop Business Portal Status Report

Secretary Ackley gave the committee a brief history of the one-stop business portal, which was created by legislation in 2014. Over the next two years, the legislature has appropriated \$1 million for planning and implementation. There is a steering committee composed of appointees from numerous agencies, and there is a project team with appointees from various agencies. There is also a business advisory group. He provided the committee with a flow chart showing progress of the effort and the participants. A vendor has been selected, and contract negotiations are proceeding. The project is on schedule for an initial basic portal to go online in early 2017. A more robust portal will go live in late 2017.

Topics of the committee's discussion included:

- the membership of the business advisory group;
- the frequency of meetings;
- quality control to ensure participation by small businesses;
- the role of the legislature in getting the one-stop business portal systemitized;
- specific time schedules;
- 24/7 accessibility of agency portals and customer support;
- compliance with federal and local regulations;
- cyber-security aspects;
- a business emphasis on cutting paperwork;
- potential statute changes as they may affect rulemaking;
- the continual need for feedback;
- the reasons for including the Human Services Department;
- significant successes in other states (e.g., Kentucky);
- the reasons some agencies are left off (e.g., the Facilities Management Division of the General Services Department);
- the potential to integrate municipalities, counties and other political subdivisions on the one-stop business portal;
- access to all state agencies;
- attendance and participation by all agencies at the planning committee meetings; and

- how to make deployment fit the time line.

Remote Piloted Aircraft

Jennifer Sensiba, a photographer and drone business operator, showed a drone-recorded video of a planned road alignment in Los Lunas as an example of the beneficial use of drone technology, with which any potential legislation should avoid interfering. She said that the Federal Aviation Administration (FAA) was slow to act, but it adopted Part 107 rules, which provide that any recreational user of a drone under 2.2 pounds be required to register. The registration fee is \$5.00 for noncommercial users for an unlimited number of drones and \$5.00 for commercial users per drone. She showed where this registration is made quite easy on the FAA website. Local and state law enforcement agencies have access to the information. The FAA requires all commercial users to obtain a piloting license. The rules also limit the use of drones to under 400 feet within the line of sight of the operator and not above anyone who is not involved in the operation of that drone. There are also regulations limiting drone use near airport air space. There are no laws in New Mexico currently addressing drone use, except general laws that address interfering with an aircraft. There is a five-year term for drone registration. On August 27, new FAA rules will take effect that require a two-year commercial pilot certification at a cost of \$250, and the certification exam includes a background check by the Transportation Security Administration. There is an online study guide for prospective drone pilots.

Committee discussion addressed:

- the accuracy of permit and zoning enforcement;
- shooting down a drone would be covered by state law on interfering with aircraft, which makes it a crime punishable as a fourth degree felony;
- the FAA count of how many drone pilots are registered;
- the military use of drones;
- the applicability of Part 107 rules to local governments;
- the use of drones for building permit inspections to pick up every carport, garage and garden structure;
- the potential need for state law to clarify local government use;
- the use by tax assessors to look at properties changing from agricultural use to development;
- what the legislature needs to do, e.g., leave federally licensed people alone but maybe regulate recreational drone users and drone use for criminal activity;
- the prices of drones; and
- dissemination of registered drone information to local law enforcement.

After the committee recessed, Ms. Sensiba demonstrated the capability of a drone in the Kit Carson Electric Cooperative parking lot.

Tuesday August 23

Public-Private Partnerships

Mike Puelle, chief executive officer, Associated General Contractors of New Mexico, told the committee that the legislature needs to consider new tools to address infrastructure needs in New Mexico. Infrastructure is the foundation of the state's economy, education, public safety and quality of life. It is diverse and continually needs improvement. The state needs legal and institutional tools to keep up with critical infrastructure, he said. He introduced Wayne Rutherford, a member of the board of Associated General Contractors and a contractor based in Taos. Mr. Rutherford said he has survived lots of recessions and knows what it takes to keep small town businesses healthy.

Senator Padilla joined Mr. Puelle at the witness table and explained that he will co-sponsor a public-private partnership (P-3) bill this session, as he did last session. He said that he hopes it will be broadly appealing to use as an economic development engine. Senator Padilla said he expects to see upwards of 10,000 to 15,000 jobs out of this initiative.

Mr. Puelle said there are lots of data about P-3s. The Bipartisan Policy Center is a national group from which he provided two handouts. The handouts describe benefits, why P-3s should be used and recommended actions by state legislatures. He said that P-3 initiatives are open-ended, and, hence, he is open to amending the bill to make it more amenable to more folks. P-3s vary from state to state, and there is no cookie-cutter approach. It is a partnership, a framework. Sometimes it is not the right answer; sometimes it is the only answer, he said.

Mr. Puelle defined P-3 as an agreement or contract between governments and the private sector for goods or services. P-3s are voluntary for governments. The contracts hold each of the parties accountable. P-3s can be used for broadband deployment, he said. Broadband infrastructure is important for educational services and entertainment. He said it was an infrastructure that did not exist a couple of decades ago but that now leaves smaller communities economically behind if it is not present. Broadband needs cost-effective and reliable deployment.

He cited more traditional infrastructure, such as school buildings and roads, that need maintaining and keeping up to standard. Water and energy efficiencies help manage government budgets. Energy efficiencies, for example, and updating public buildings can pay for those buildings' capital costs over time. There may be lots of areas for savings. P-3s are useful in many areas of government services.

Mr. Puelle emphasized that P-3s are not the same as privatization. They do not involve giving the function of government to the private sector. They are rather like sharing work, responsibilities, financial risk and revenue. The bill that Senator Padilla will sponsor allows and facilitates these frameworks to come together, Mr. Puelle said. He explained the need for a bill that includes best practices to facilitate better P-3 agreements. The bill will provide for transparency, competition and avoidance of "back-room deals" lingo. The bill will also allow for

a comprehensive long-term view of projects. Infrastructure projects are not just about the build phase, but they also include maintenance and keeping up standards. He mentioned examples of unbuilt courthouses, water infrastructure appropriations not being spent and expensive failures of projects that were not P-3 structures. There needs to be a comprehensive view from the beginning.

Mr. Puelle said that advantages include the ability to leverage money and bring multiple revenue sources to bear on projects, and P-3s allow project proponents to look at a variety of public money methods. He said private-sector interest is in long-term stable investments. He concluded by saying that there is an enormous amount of capital available for P-3 projects.

Senator Padilla closed by adding that P-3 projects will not exclude organized labor. They will bring outside money into New Mexico and will help put people to work.

Questions and comments from the committee members addressed:

- whether the City of Espanola could buy the Hunter Building and turn it into a food hub using a P-3 approach;
- how P-3 legislation would interact with the Procurement Code;
- the Constitution of New Mexico's Anti-Donation Clause;
- the old Albuquerque High School renovation as an example of the need for a P-3;
- more detail on ownership by the public;
- the voluntary nature of P-3 contracts;
- a bill would require provisions for what kind of condition the asset has to be in when it is returned to the government-jurisdiction owner;
- the use for blighted areas;
- P-3s will not lead to toll roads in New Mexico;
- the integration of union labor, a living wage and prevailing wage laws;
- the philosophical issue of government shirking its duties;
- that failures with P-3s could lead to a slippery slope into privatization;
- how P-3s can be used by municipalities; for example, for fire and police services;
- help for small rural communities;
- that examples include conservation-type projects, such as power purchase agreements for clean, cheap energy and water metering paid for over time;
- the interaction with local municipalities and counties over building permit approvals and zoning;
- a bill threshold of \$50 million or more above project costs to qualify as a P-3;
- a concern about consulting with small communities on developing the bill;
- a skittishness about mixing public and private funds;
- University of New Mexico's lack of expertise to develop, run and market an entertainment district next to the Pit;
- broadband deployment in Utah;
- the Burrell College of Osteopathic Medicine at New Mexico State University;

- the "dig once" strategy for broadband deployment; and
- concerns about privatizing water systems.

Education Networks of America

Gary McKerley, chief technology officer, Garry Lough, government relations, and Gale Nelson, vice president of customer services, all of Education Networks of America (ENA), spoke to the committee about bundled IT services to school districts and broadband connectedness. ENA has a nationwide backbone but serves only three school districts in New Mexico through Apple's national connect system: the Gallup-McKinley County School District, the Pueblo of Laguna and the Los Lunas Public School District. One out of every 14 students in the U.S. is served by ENA's network. The company has 6,000 sites in 550 school districts in the country.

Questions and comments from committee members dealt with the following:

- ENA provides the "pipes" to students, not the computers or software;
- the needs from the legislature are none, it just needs an information presentation;
- E-Rate leverage for New Mexico to qualify for federal money;
- clarification of ENA services as an E-Rate service provider and not an E-Rate consultant;
- New Mexico is an 80% E-Rate state, meaning that ENA services can be subsidized by the federal government; some states are leaving this money on the table;
- the potential enhancement of existing broadband pipelines;
- charter schools' responsibility for their own E-Rate applications;
- cyber-security issues over student identification and social security numbers;
- the cost of ENA services;
- the Nebraska and New Jersey models aggregate services using multiple carriers;
- the cost per student;
- solutions to address and manage network issues in schools; and
- use of on-the-ground and local vendors.

New Mexico Business Climate for Technology Enterprise

Jack Vigil, chief executive officer, Saul Villalobos and Eric Martinez, all with Harmonix Technologies, gave the committee an overview of the company's services. It provides managed services and IT outsourcing, special systems architecture planning, technology asset documentation, network switching, server deployment, wireless, unified communications, storage area networking, data center and desktop virtualization, backup and disaster recovery, software and license administration, internet protocol surveillance and access control and structured cabling. The company has worked with more than 20 well-known and prominent corporate partners around the world. Featured New Mexico customers include Taos County, Roosevelt County Electric Cooperative, Cibola General Hospital, South Central Colfax County Special Hospital District clinics, the Santa Fe Public School District, the Espanola Public School District, the Portales Municipal School District, the Dulce Independent School District and Fiore Industries. Mr. Vigil said that New Mexico has middle-mile infrastructure for massive data

center capabilities, but he explained that outsourcing by government agencies to out-of-state and large global companies hinders small and local businesses. Statewide broadband expansion initiatives could significantly expand data storage services to create jobs, develop the economy and stimulate revenue in New Mexico. He said that one of the biggest obstacles to Harmonix doing more business in New Mexico is delays by state agencies in paying their bills to small businesses.

Discussion from committee members included:

- potential Procurement Code improvements to make it more business-friendly, such as creation of a small business advocacy agency, requiring a percentage of government procurement to be dedicated to in-state businesses and enhanced ranking of New Mexico-based businesses;
- intellectual property;
- the data center for Facebook in Los Lunas;
- what may attract level 3 data centers;
- the inability to connect to middle-mile infrastructure;
- a subcommittee on broadband;
- legislation;
- coding classes in kindergarten through twelfth grade; and
- the business-antagonistic culture and "rice bowl" mentality.

Adjourn

There being no further business, the STTC adjourned at 12:01 p.m.