

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

**November 29-30, 2010
Room 311, State Capitol**

The fifth meeting of the Science, Technology and Telecommunications Committee was called to order by Senator Stephen H. Fischmann, chair, on Monday, November 29, 2010, at 9:10 a.m. in Room 311 at the State Capitol.

Present

Sen. Stephen H. Fischmann, Chair
Rep. Roberto "Bobby" J. Gonzales,
Vice Chair
Rep. Janice E. Arnold-Jones
Sen. Dede Feldman
Rep. Jane E. Powdrell-Culbert
Rep. Debbie A. Rodella
Rep. Nick L. Salazar

Absent

Sen. Vernon D. Asbill
Sen. Kent L. Cravens
Sen. Phil A. Griego
Sen. Linda M. Lopez
Rep. Luciano "Lucky" Varela
Rep. Richard D. Vigil

Advisory Members

Rep. Karen E. Giannini (11/29)
Sen. Richard C. Martinez
Rep. Danice Picraux
Sen. John M. Sapien
Rep. Don L. Tripp
Rep. Jeannette O. Wallace

Sen. Mark Boitano
Sen. Carlos R. Cisneros
Rep. Ben Lujan
Rep. Kathy A. McCoy
Sen. William H. Payne

Guest Legislator

Rep. Thomas A. Anderson (11/29)

Staff

Gordon Meeks, Legislative Council Service (LCS)
Ralph Vincent, LCS
Jeret Fleetwood, LCS (11/29)
Adan DelVal, LCS (11/30)

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

Minutes Approval

Because the committee will not meet again this year, the minutes for this meeting have not been officially approved by the committee.

Guests

The guest list is in the meeting file.

Handouts

All handouts and written testimony are posted on the web site and are in the meeting file.

Laboratory Directed Research and Development

James Woodard with the innovations and partnerships program at Sandia National Laboratories told the committee that Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration. He said that the Sandia Science and Technology Park, the New Mexico small business assistance program and the entrepreneurial separation to transfer technology program are all examples of the innovations and partnerships program. The laboratory directed research and development (LDRD) program is the sole source of discretionary research and development funds for staff-generated entrepreneurship. The LDRD creates the future of the laboratories, he said. The quantum information science and technology project resulted in next-generation computing leadership, for example. Quantum computing is expected to provide exponential advances in speed over classical computing, but, to date, the hardware components of such a system do not exist.

A second project, he said, is exploration and development of air bearing heat exchanger technology that could have a significant impact on energy use and efficiency. It could extend the range of electrical vehicles, solve the thermal brick wall problem, provide more efficient air conditioning and reduce electricity demand load spikes. The proof-of-concept experiments demonstrated improvement by a factor of 30 in heat transfer per unit of heat exchanger area.

A third project is the rapid threat organism recognition (RapTOR) to identify bio-threats. He said it promises to develop a new, rapid and powerful approach for identifying unknown pathogens, thus preventing or containing outbreaks in their earliest stages. An example of this is bio-warfare and infectious disease detection microsystem to rapidly detect botulism in milk. This is a clear path to a detector capable of simultaneously identifying a vast number of different agents: chemical, biological and radionuclides.

A fourth project, the sunshine to petrol project, uses solar energy for synthetic fuel production for energy sources that do not produce carbon dioxide emissions. With this technology, solar power could be used to convert carbon dioxide to synthetic fuels.

Also in the solar energy arena, a greater-than-50 percent efficient photovoltaic solar cells project shows promise for enhanced photovoltaics. He said monolithic photovoltaic cells typically produce solar conversion efficiencies in the 20 percent range. Stacked individually grown and connected junctions, each sensitive to a different region of the solar spectrum, are being evaluated at Sandia National Laboratories for greater photovoltaic system efficiencies.

A fifth project at Sandia National Laboratories involves looking at enabling secure, scalable

microgrids with high penetration of renewable energy sources.

Mr. Woodward told the committee that the Sandia Science and Technology Park was founded in 1998 as a partnership tool for Sandia to create joint research and development, commercialize new technologies, develop business, strengthen supplier relations and foster economic development.

Mr. Woodward described the mission of the New Mexico small business assistance program based on the small business tax credit that allows up to \$2.4 million per lab per year in technical assistance to for-profit small businesses. It allows companies in rural counties to receive \$20,000 per business each year and urban county businesses to receive \$10,000 per business each year. Since fiscal year 2000, 2,666 assistances have been provided to 320 businesses in 33 counties for a dollar value of \$20.7 million.

Mr. Woodward ended his presentation by explaining that the entrepreneurial separation to transfer technology program at Sandia, whereby employees may voluntarily suspend their employment for two years to try to start a business and are guaranteed reinstatement by Sandia National Laboratories if they return before expiration of the term of the agreement. Participants may start up or help expand technology businesses.

The committee discussed:

- the chasm between basic research and development and deployment;
- cooperative research in development projects;
- the thermal brick wall problem;
- collaboration between Sandia National Laboratories and Los Alamos National Laboratory;
- military installations opting out of the grid, since Holloman Air Force Base and White Sands Missile Range have been ordered to become energy autonomous by 2023;
- intellectual property ownership;
- the role of the New Mexico Institute of Mining and Technology; and
- Sandia National Laboratories' program for leaves of absence for employees who want to start a business or help an existing one.

Clean Line Energy

Clean Line Energy Partners representative Keith Sparks told the committee that his company focuses on building renewable energy superhighways to connect renewable resources to load centers. He said the company seeks to develop, own and operate long-haul, high-voltage, direct-current (HVDC) transmission lines across the United States. Clean Line Energy Partners' principals, partners and investors bring a unique perspective, experience and focus to transmission line development, along with a track record of success in energy project development, Mr. Sparks testified. Clean Line Energy Partners has a portfolio of projects for HVDC transmission lines to move high-quality wind and solar energy to demand centers. In the Clean Line Energy Partners business plan, the generator or load-serving entity pays for

transmission capacity. Mr. Sparks said that HVDC is more efficient over long distances; transfers more power with less line loss than comparable alternating current lines; has improved reliability; enhances system stability; gives the operator complete control over power flow; improves the quality of electricity from wind projects; and helps reduce overall integration costs. He said that HVDC also has a smaller footprint, requiring narrower rights of way and lower tower height than alternating current lines. Mr. Sparks said that the planned Centennial West Clean Line will deliver renewable energy from eastern New Mexico to the west coast using a 3,500-megawatt configuration, with 500 kilovolt to 600 kilovolt bipole transmission lines across approximately 800 miles at an estimated cost of \$2.5 billion. The company plans that the preferred corridor be located across the Navajo Nation.

The committee discussed:

- the relationship of this line to others being planned, such as SunZia, Tres Amigas and High Plains;
- the source of the capital for the project;
- the relative cost and quality differences between direct current and alternating current technology;
- Sandia's development of direct current cable for burying that is currently being used in Europe;
- California's renewable portfolio standard of 33 percent by 2020;
- the potential co-location of transmission lines;
- the need for converters at both ends of the transmission line costing \$250 million;
- the cost of the line, which will be \$80.00 per megawatt delivered to California (\$.30 per kilowatt hour, compared to \$.08 to \$.09 here in New Mexico);
- the correlation between high-priced renewables here and existing prices independent of the renewable portfolio standard requirements;
- the fact that the renewable portfolio standards actually create the floor for electric power prices rather than the real cost of conventional fuel sources (coal or gas) and the economics of electric power pricing;
- wind being the most economical renewable energy to meet California's renewable portfolio standards;
- the economic development benefits of the Clean Line Energy Partners-transmission line (5,000 jobs, according to Mr. Sparks);
- that the counties traversed by the proposed line corridor include Cibola, Curry, Harding, Guadalupe, McKinley, Quay, Roosevelt, Sandoval, Santa Fe and Union;
- the environmental impacts;
- price tradeoffs of burying the lines versus overhead lines;
- the use of highway corridors for rights of way;
- that the market aims for California customers; that no New Mexico utility service is expected from this line; and that no benefits other than construction jobs, taxes and rights-of-way payments are expected from this line;
- that the 5,200-megawatt transmission of renewables is expected to create 1,200 permanent jobs in New Mexico and the potential for manufacturing jobs is a

- secondary benefit; and
- the need to target tax credits for manufacturing jobs in New Mexico.

Information Technology Service Life Cycle

Marlin Mackey, secretary of information technology (IT), presented information on technology historic milestones, i.e.:

- the mechanical age 1450-1840;
- Gutenberg printing press 1450;
- Oughtred slide rule early 1600s;
- Babbage's difference engine 1822;
- Ada Augusta Byron, first programmer 1840;
- electromechanical age (1840-1940);
- voltaic battery late 18th century;
- telegraph 1800s;
- Bell's telephone 1876;
- Marconi's radio 1894;
- Hollerith's punched cards 1890;
- Aiken's Mark 1 computer 1940;
- electronic age 1940-present;
- ENIAC vacuum tube computer 1946;
- EDSAC first stored program 1949;
- UNIVAC first commercial computer 1951;
- vacuum tubes, punched cards 1951-1958;
- transistors, magnetic tape 1959-1963;
- integrated circuits 1964-1979; and
- mainframe centralized processing
- mini-computer, first distributed processing
- microprocessor, PC, GUI (graphics user interface) 1979-present.

Secretary Mackey described changes in recent IT management paradigms and compared national and New Mexico trends. He said that state initiatives, as exhibited by responses to a survey from 29 states in 2007, reveal a strong trend toward states consolidating their computing assets into a raised-floor, secured, centralized data center. Many states are utilizing remote backup data centers for the purpose of backup, disaster recovery and business continuity, Secretary Mackey said. He gave an overview of New Mexico's status in consolidation of data center services, mainframe services, application hosting, enterprise applications, email, help desk, desktop telephony, server administration, storage and backup, security, network services, cellular telephony, audio and video conferencing and other IT functions.

He then listed his department's 2010 accomplishments:

- applied/received \$43 million in federal grants;

- granted a Federal Communications Commission license for a public safety network (21 granted nationally);
- reduced operating expenses by 15 percent (\$7 million);
- reduced service rates by \$3 million (fiscal year 2011) and \$1.8 million (fiscal year 2012);
- developed the sunshine portal pursuant to the Sunshine Portal Transparency Act;
- developed a prioritized list of cost/value initiatives;
- completed a service support plan for Spaceport America;
- completed design and pricing for unified communications;
- completed Phase 1 of server consolidation;
- implemented performance dashboard;
- implemented SHARE improvements and a master schedule;
- implemented new IT governance structure;
- implemented new IT security policy and rule;
- completed development of Phase 1 for cloud services;
- updated the state IT strategic plan, which the IT Commission approved; and
- achieved successful oversight of IT projects.

The committee asked about:

- digital security of public data;
- security of physical facilities;
- personal security clearance requirements;
- legislative needs;
- the status of the sunshine portal;
- the status of the state's digital microwave system (150 towers);
- the status and quality of gateway portals to the state's supercomputer;
- the request for an inventory of state IT assets;
- the life expectancy of SHARE, the state's central database management system (10 years);
- the frequency of security notifications;
- the number of agencies without dedicated security personnel;
- the number of software applications in certain departments of state government;
- why so few agencies use firewalls; and
- the consolidation of procurement.

Interim Committee Transparency

Senator Sapien described the purpose of SJM 5 (2010) to require the LCS to move toward electronic document management to replace paper documents. He asked for an endorsement of the memorial again in 2011, and the committee did endorse the measure without opposition.

C. Meghan Starbuck, assistant professor of economics and international business at New Mexico State University (NMSU), told the committee that she has been researching the

economics of renewable energy in New Mexico. She is currently the economics director for the National Alliance for Advanced Biofuels and Bioproducts, a U.S. Department of Energy-funded consortium. This consortium is designed to help drive algal biofuels to commercialization. NMSU is an active partner in the drive toward algal fuel commercialization, she said, and works closely with numerous partners within the state and around the country. The research program in algal fuels spans four colleges (Agriculture, Arts and Sciences, Business and Engineering), and the NMSU's Agricultural Experiment Station in Artesia. She testified that there are research collaborations with Los Alamos National Laboratory, Sandia National Laboratories, Sapphire Energy, Inc., the Center of Excellence for Hazardous Materials Management, Pacific Northwest National Laboratories, Argonne National Laboratory, University of Arizona, Arizona State University, Colorado State University, Texas A&M University and University of Central Florida. The focus of NMSU's involvement is the development of commercially viable algal-based biofuels and developing this industry in New Mexico. The two major algal biofuels projects are the National Alliance for Advanced Biofuels and Bioproducts (a \$44 million U.S. Department of Energy project) and a \$2.5 million project for the U.S. Air Force Research Laboratory focusing on aviation fuels. NMSU is also the lead institution on a \$45 million proposal to the U.S. Department of Agriculture to research algal biofuels, she said. There are also other proposals submitted to the National Science Foundation and to a combined funding opportunity through the U.S. Department of Agriculture and the U.S. Department of Energy. Algal biofuels for New Mexico offer the possibility of creating the type of tangible, homegrown products, technologies and industries that will be the basis of sustainable long-term growth. The promise of algal biofuels is in the ability to use current infrastructure and provide a high-quality, energy-dense fuel. Ms. Starbuck said algal-based fuels are not "green compromises", such as ethanol or biodiesel, but are truly advanced fuels that are capable of fueling military vehicles and aircraft as well as fueling commercial aviation and civilian transportation. Algal biocrude is chemically similar to petroleum-based crude oil, and researchers are finding similar chemical structures in algal biocrude as are in petroleum. This provides an exciting opportunity and a new way of looking at energy production in the U.S. and in New Mexico. By being able to grow fuels, the state can create exportable technology but not exportable jobs—all while using fewer resources than other bioenergy crops, Ms. Starbuck testified. Algae are highly efficient photosynthetic organisms that require carbon dioxide to grow, and providing this carbon dioxide can result in significant greenhouse gas emission reductions. Other environmental benefits associated with algae, and not associated with other biofuel crops, include the use of nonagricultural resources in production. Brackish waters, marginal rangeland, waste nutrients and captured carbon dioxide sources comprise the key environmental inputs. Thus, the production of algal biocrude will not compete with current agricultural resources, Ms. Starbuck said. New Mexico has extensive energy and agricultural infrastructure that the nascent algal energy industry could use. The knowledge, skills, training and employment base currently employed in the agricultural and oil and gas sectors provide key competitive advantages over most other places in the world. Ms. Starbuck said that New Mexico is a state that is at the forefront of a competitive global development push.

Based on current scale-up plans, the estimated number of jobs engaged directly in algal oil production will be 44 in 2012 and 76 by the year 2020, based on a single 100-million-gallon

per year algal facility. The first 100 million gallons of algal biocrude can potentially generate 452 jobs (direct, indirect and induced) in New Mexico, with an additional \$8 million in state tax revenues. State tax revenues are estimated at \$8 million per 100 million gallons of algal biocrude produced, Ms. Starbuck said. This is exclusive of refining and distribution impacts that might accrue as a result of production. If New Mexico is successful in producing algal biocrude at scale and is successful at capturing significant market share, the economic impacts to the state become even more significant. If New Mexico can capture 10 percent of the upcoming renewable fuel standard of 21 billion gallons by 2022, New Mexico could see as many as 1,596 jobs in direct employment, with a total (direct, indirect and induced) employment level of 12,729 jobs, Ms. Starbuck said. The increase in gross state product could be \$483 million and as much as \$91 million in increased state tax revenues. If New Mexico could capture 30 percent of the renewable fuel standard, total employment could reach approximately 27,000 and tax revenues could be in excess of \$200 million. As of 2007, the oil and gas extraction sector employs about 8,000 people. Thus, Ms. Starbuck testified, if successful, an algal fuel industry represents an important path forward for New Mexico.

The barriers that could prevent the promise from being achieved are:

(1) technical — the "crop protection", increasing yields, quality control, product mix, low-cost harvesting, process scale-up and logistics;

(2) economic — a function of solving the production process in a low-cost, resource minimizing system; and

(3) policy — undue costs of regulatory delays (environmental regulation is a go/no go criterion for investors).

The committee was interested in:

- photosynthesis resources in New Mexico;
- the pilot scale-up plant in Columbus financed by Sapphire Energy;
- the potential use of algal biofuel as diesel fuel;
- the use of algal biofuel in school buses;
- the altitude constraints;
- the role of universities;
- the water requirements;
- the Honeywell contract to fuel the U.S. Air Force;
- China and India's investment in algal biofuel;
- the extraction method to remove liquid versus the wet solvent extraction system using hexane and solution recovery services; and
- the volume of effluent, the use of a chelating agent and the potential use of the effluent in animal feed or recycling ponds for fertilizers.

Telecommunications Competition and Facility Relocation Cost Recovery

Leo Baca and Loretta Armenta, representing Qwest, spoke to the committee about deregulation of Qwest and recovering costs of relocating lines when required by local government. Two previous bills endorsed by the committee were presented, and the presenters requested endorsement again this year. The committee acted to endorse both measures without opposition.

Government Restructuring; Committee Discussion

In its discussion of restructuring state government, the committee spent most of its time considering the dilemma of the Public Regulation Commission (PRC). Because the PRC is a constitutional body, any proposed changes are subject to voter approval, so there was considerable discussion of the complexities of the idea of reorganizing. Several members of the committee began their comments by saying that the PRC should be repealed. But, they quickly added, that any serious proposal for eliminating the PRC or changing its authority must recognize that the existing functions and mission of the PRC must be accommodated.

For example, where should the Insurance Division of the PRC be relocated? The same could be asked about the Utility Division and the State Fire Marshal Division.

Another significant question is the clarification of jurisdictional boundaries between the federal government and the state over the various utility authorities, particularly electric power generation, transmission and distribution. This industry, like the telecommunications industry, is undergoing rapid and significant structural change, and regulatory frameworks developed decades ago for previous technological paradigms no longer make sense today with rapidly evolving technologies.

The sense of the committee was that any changes to the PRC structure or its functions should be considered after detailed review. The implications of haphazard legislation for narrow political purposes were discussed. Several comments were made about inconsistencies among the various laws enacted by previous legislatures; for example, some entities being covered by certain provisions in law while others are exempted, or certain services covered while others are not.

The nature of how politics affects elected officials rather than appointed officials was also a focus of attention. The question was asked several times: did the legislature err in creating an elected governing authority to replace appointed ones?

Whether corporate filings should be through the secretary of state or the PRC was another issue discussed. The general consensus was that this is one function that should be housed at the PRC exclusively.

Transparency was discussed in the context of the PRC, and suggestions were made that the PRC should webcast all of its hearings and that all documents filed for cases before the commission should be available to the public online. Comments were made that the PRC is not responding to technological changes, either in its own business management or its regulation of

industry. Whether the PRC should regulate companies or services was asked, and committee members recognized that the legislature is partly to blame for the way it wrote the laws governing the PRC.

The quasi-judicial nature of the PRC was recognized as a problem and should be re-thought. In some ways, the PRC has been a moderating influence, and any reform should avoid the unintended consequences that previous reform efforts failed to prevent.

The themes of the discussion were the need for:

- careful evaluation of the structure and function of the PRC;
- consistency in policies;
- a replacement structure for the PRC in place before repeal or change;
- a comprehensive or holistic approach to setting policy rather than an incremental approach, whether the PRC or some other entity is setting policy; and
- credentialing of PRC commissioners or board members.

In discussion of the Energy, Minerals and Natural Resources Department, the issue of oversight and legislative review of agency rules was the theme, just as it was for the Radioactive and Hazardous Materials Committee.

Finally, E-911 was discussed at length, with no real consensus. Some felt the transfer of E-911 to the Department of Public Safety made sense while others wanted it to remain at the Local Government Division of the Department of Finance and Administration.

Spaceport America

Rick Homans, director of Spaceport America, gave the committee a status report of the facility. He said that the spaceport is the world's first purpose-built commercial spaceport and it is designed for next-generation, reusable space launch vehicles. The anchor tenant will be Virgin Galactic, with a 20-year lease worth between \$150 million and \$250 million. The spaceport will be operational in 18 to 24 months. The site chosen for the spaceport, southeast of Truth or Consequences and north of Hatch, is ideal because of low population density, restricted airspace, clear weather, high elevation (and thus lower gravity to overcome for launch vehicles) and low latitude (ideal conditions for space access), Mr. Homans said. Construction is in full swing with 13 of 14 contracts already let and 600-plus jobs created. Completion is estimated for the second quarter of 2011. Virgin Galactic has conducted its first glide flight. The Obama administration recently announced that the United States is committed to encouraging and facilitating the growth of a U.S. commercial space sector that supports U.S. needs, is globally competitive and advances U.S. leadership in the generation of new markets and innovation-driven entrepreneurship. The president's plan validates New Mexico's vision and investment in commercial space development. New Mexico has won a \$10 million grant from the Federal Aviation Administration. NMSU won a national competition to host the Federal Aviation Administration's Center of Excellence for Commercial Space Transportation, a research consortium that includes the New Mexico Institute of Mining and Technology and the

universities of Florida, Colorado, Texas and California. This research focuses on subjects that include: space launch operations and traffic management; launch vehicle systems, technologies and operations; and commercial human space flight and space commerce. New Mexico is the national center for commercial space development, Mr. Homans said.

He also summarized the project's budget:

- pre-construction costs: \$44.3 million;
- Phase I: \$112 million;
- Phase II: \$55.8 million; and
- weather station and FOD equipment: \$43 million.

The committee discussed:

- initial space tests in the early 1990s;
- the status of the environmental impact statement;
- the concept of a hotel in space;
- the definition of commissioning the facilities;
- the use of New Mexico companies as contractors (all 14 companies under contract are New Mexico resident companies);
- the issuance of requests for proposals to attract local businesses;
- the location of prime contractors;
- the operational readiness review;
- risk analysis;
- participation of the Air Force Research Laboratory;
- the next steps in moving toward orbital launches;
- the membership of the Spaceport America board;
- liability issues;
- other states competing with New Mexico;
- the status of the NMSU aerospace program;
- the employment opportunities in the space-related manufacturing industry in New Mexico;
- the number of nonconstruction, permanent jobs and potential multiplier employment projections (1,000 to 1,500 jobs);
- the plans for a destination resort associated with Spaceport America; and
- the reliability of a visitation projection of 500,000 per year.

Space Alliance Technology Outreach Program (SATOP)

Naomi Engelmann told the committee that SATOP is asking the legislature for \$65,000 to support SATOP's technical assistance to businesses involved in space commercialization. SATOP provides up to 40 hours of free engineering technical assistance to any type of small business. SATOP was established in 2001 as a nationwide program. SATOP relies on an annual federal appropriation to the National Aeronautics and Space Administration (NASA) for its

funding. SATOP's alliance partner network, comprised of private engineering firms, universities and colleges, and national laboratories that have an affiliation with NASA, provides the expertise. SATOP is operated by four regional centers located in New Mexico, Texas, New York and Florida. Each center covers 11 to 15 states. New Mexico's SATOP center is responsible for the 11 western states: Washington, Oregon, California, Nevada, Arizona, Utah, Idaho, Montana, Wyoming, Colorado and New Mexico. The Regional Development Corporation operates the New Mexico SATOP center. In 2008, SATOP ceased activity nationwide due to a lack of federal funding, with the exception of Texas, which received state funding to keep its program operational. SATOP was re-funded and reestablished nationwide in 2010. SATOP is a public-private partnership with a successful track record of assisting small businesses nationwide.

According to Ms. Englemann, prior to SATOP's suspension in 2008, the program's impact on New Mexico's small businesses entailed 70 solved requests and 21 created or retained jobs. She said that there has been \$4.5 million in total economic impact since reopening the program in 2010. Twenty-seven New Mexico-based small businesses have received SATOP assistance. In 2010, seven New Mexico-based alliance partners, NMSU, New Mexico Institute of Mining and Technology, White Sands Missile Range, Zia Design Group, New Mexico Manufacturing Extension Partnership, Sandia National Laboratories and TEAM Technologies, have provided assistance in more than 46 requests nationwide. For 2011, the New Mexico SATOP center has only received enough federal funding to support 15 small business requests. SATOP operates on a first-come, first-served basis. This means that it is possible that no New Mexico-based small businesses will receive SATOP assistance in 2011. SATOP is a valuable economic development tool that must be preserved in New Mexico, Ms. Englemann said.

The committee discussed:

- partnership with the Sandia National Laboratories and the Los Alamos National Laboratory small business technical assistance programs; and
- the minimum request of \$50,000 to help 25 small businesses.

The minutes of the October meeting were approved.

The committee adjourned at 11:50 a.m.

Representative Rodella asked that the committee take note that Los Alamos National Laboratory had not responded to her questions. In answer to a question posed by Representative Arnold-Jones, Secretary Mackey said that there are 800 Department of Information Technology anchors statewide.