



A Touchstone Energy® Cooperative

Les W.J. Montoya

Mora-San Miguel Electric Cooperative, Inc.

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Skills

- Over 40 years management and supervisory experience in utilities operations and governance
- Knowledgeable in hiring and training
- Financial Management, knowledgeable and capable of coordinating with financial staff
- Strong interpersonal skills
- Ability to interact positively with all levels
- Commitment to high work ethics and attainment of cooperative goals and objectives
- RUS knowledge of specifications, regulations, and standards
- Communication, ability to communicate openly and effectively
- Cooperation & Teamwork, ability to strategize, coordinate, and work with others in identifying and developing goals and objectives for the organization
- Consumer/Member Focus
- Safety Oriented
- Personal commitment to high standards of integrity
- Critical Thinking
- Functional Excellence
- Organization Awareness

Professional Expertise

Mora-San Miguel Electric Cooperative, Inc. | CEO/General Manager | January 2017 - Current

Works with the Board of Trustees and staff to achieve the Cooperative's mission and vision for the future to include meeting the electrical transmission and distribution needs. Provides leadership and develops & implements strategic plans to ensure the Cooperative is responsive to its consumers and employees. Ensures the Cooperative effectively communicates, pro-actively with and is responsive to the needs of a diverse population of member owners. Establishes Cooperative presence in appropriate community service organizations. Encourages utility participation in selected community activities. Ensures that the Cooperative conducts its business in accordance with sound financial management practices, policies and objectives established by the Board of Trustees and the Bylaws of the Cooperative. Participates in contract negotiations, labor/management meetings and the administration of Collective Bargaining Agreements. Responsible for development and management of the annual budget, assists in all phases of the budget process. Works with department heads for departmental budget planning, with the office staff for overall budget planning, monitoring and presentation to the Board of Trustees. Overall management of Cooperative departments: Ensures that all departments maintain a high level of expertise. Provides leadership to develop and foster a positive work environment. Encourages staff participation and suggestions. Makes decisions with recommendation from staff in matters relating to the electrical power supply, financial policies, procurement, staffing and administrative policies. Reports to an elected five-member Board and is responsible for keeping the Board informed of regulatory and political issues affecting the Cooperative, the financial health of the Cooperative, staffing adequacy and system reliability.

Lazaro Barela

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Professional Summary

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Systems Operations Manager

APRIL 2010 - PRESENT

Oversees daily operations at site, directs operations crew by assigning work orders to complete, maintenance repair and expansion of electric distribution system, keeping team production moving at optimal pace. Evaluated and updated safety protocols to reduce risk of accidents and incidents. Tracked employee attendance and punctuality, address repeat problems quickly to prevent long-term habits. Plans and budgets to complete field work. Responded to emergencies and outages.

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Line Superintendent

DECEMBER 2003 - APRIL 2010

Maintained safety onsite and upheld all OSHA regulations. Trained workers in proper methods, equipment operation and safety procedures. Administered disciplinary actions to workers violating safety regulations and company policies. Supported project coordination and smooth workflow by coordinating materials, inspections, and contractor actions. Responded to emergencies and outages.

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Working Foreman

OCTOBER 1999 - DECEMBER 2003

Prepared and submitted reports on job progress and safety conditions to upper management. Reviewed daily work assignments and delegated tasks to employees to supervise completion. Answered and responded patiently and effectively to consumer inquiries, questions and complaints.

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Journeyman Lineman

MARCH 1995 - OCTOBER 1999

Inspected and tested lines, recording and analyzing test results to assess transmission characteristics and locate faults or malfunctions. Responded to emergencies and outages. Removed old poles and hardware and replaced with new equipment. Performed maintenance and reconducting work in varied weather conditions. Resagged loose lines to prevent failures. Complied with legal regulations and company procedures to achieve high-quality performance in safe working environments.

Skills

Cross-functional team management

Team management

Problem Resolution

Employee

Development

Safety Oversight

Job Reporting &
Documentation

Safety Policies &
Procedures

Lockout-Tagout

Electrical Distribution
Systems

Heavy Equipment
Operation

Employee Mentoring

Crew Supervision

Employee Performance
Reviews

Daily Logs

System Performance

Julie Pacheco

(b)(6)
[Redacted]
[Redacted]
[Redacted]

Professional Summary

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Finance Manager

MAY 2018 - PRESENT

Reviewed documentation and identified financial discrepancies where applicable. Forecasted trends and prepared operation budgets based on revenue trends and expenditures. Prepared and managed large capital expenditure budgets to effectively account for infrastructure investment and long-term operations and maintenance. Supported Operations, Management and market efforts to increase revenue and overall financial health. Trained new and existing staff members in various accounting principals, while developing procedures and standards for accountability purposes to prepare for job requirements

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Human Resource Manager

AUGUST 2016 - MAY 2018

Worked with managers to achieve compliance with organizational policies, providing clarifying information and recommending necessary changes. Processed employee claims involving performance issues and harassment. Collaborated with legal and compliance teams to review paperwork, obtain feedback, and procure available information for new training processes. Developed a comprehensive process for new hires and reviewed new hire productivity, optimizing onboarding effectiveness.

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Junior Accountant

NOVEMBER 2004 - AUGUST 2016

Collected and reported monthly expense variances and explanations. Maintained integrity of general ledger and chart of accounts. Compiled and analyzed financial information to prepare entries for general ledger accounts. Partnered with auditors to track errors and add contributions to maintain accuracy. Assisted with preparation of monthly financial statements.

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Bookkeeper/General Office

OCTOBER 1994 - NOVEMBER 2004

Gathered, evaluated and summarized account data in detailed financial reports. Recorded deposits, reconciled monthly bank accounts and tracked expenses.

Skills

Cross-functional team management

Team management

Problem Resolution

Employee

Development

Cost Management

Manage Contracts

Accounting Techniques

Microsoft Office

Manage Budgets

Verbal & Written Communication

Business Management Principles

Financial Management

Workforce

Improvements

Employee Support

Audit Preparation

Isaiah Romero

(b)(6)
[Redacted]
[Redacted]
[Redacted]

Professional Summary

Mora-San Miguel Electric Cooperative, Inc., Pecos, New Mexico — Operations Superintendent

MAY 2021 - PRESENT

Directs & supervises operations staff and keeps employees compliant with company work standards, policies and procedures. Developed and maintained relationships with external vendors and suppliers. Developed systems and procedures to perform maintenance & expansion and team efficiency with the company safety committee. Analyzed and reported on key performance metrics to senior management. Responded to emergencies and outages.

Mora-San Miguel Electric Cooperative, Inc., Pecos, New Mexico — Working Foreman

NOVEMBER 2017 - MAY 2021

Created and implemented plans to maximize efficiency of workers. Addressed issues with employees to manage healthy conflict resolutions. Trained workers in proper methods, in line maintenance & repairs, equipment operation and safety procedures. Complied with operational standards, legal regulations and company procedure to achieve high-quality performance in safe working environments. Responded to emergencies and outages.

Mora-San Miguel Electric Cooperative, Inc., Pecos, New Mexico — Journeyman Lineman

JUNE 2014 - NOVEMBER 2017

Installed and maintained overhead and underground electrical power lines and auxiliary equipment. Inspected and tested lines. Responded to emergencies and outages. Sought continuing education opportunities to refresh working knowledge and develop new techniques.

Mora-San Miguel Electric Cooperative, Inc., Pecos, New Mexico — Apprentice Lineman

JUNE 2009 - NOVEMBER 2017

Installed and maintained overhead pole components and Underground Distribution equipment. Responded to emergencies and outages. Provided successful working within tight deadlines and a fast-paced environment. Observed company safety rules and regulations to minimize workplace accidents and incidents. Inspected power lines and poles for signs of damage or wear, interference, and degradation, and reported findings to

SKILLS

Process Improvement Strategies
Heavy Equipment Operation
Employee Development
Staff Management
Electrical Knowledge
Verbal & Written Communication
Lockout/Tagout
Active Listening
Emergency Preparedness
Emergency Repair
Electrical Distribution Systems
OSHA Safety Guidelines
Safety Meetings
Safety Procedures
Electrical Maintenance & Repair
Contract Negotiations
Employee Performance Reviews

supervisor.

Mora-San Miguel Electric Cooperative, Inc., Pecos, New Mexico — *Meter Reader*

SEPTEMBER 2006 - June 2009

Attended safety meetings and took part in safety awareness training and programs. Repaired non-functioning meters and tested to verify operational status. Checked accuracy of meters against previous data and kept detailed reports of inconsistencies.

April Gonzalez

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[Redacted]

Professional Summary

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Systems Operations Supervisor

OCTOBER 2012 - PRESENT

Promotes positive team working relationships. Coordinates and manages operations team; leaders, journeyman, and apprentices in performance of maintenance repairs. Expansion and general work orders, record for all materials and equipment. Procured aid utilized to complete all work performed by crews. Accounts for inventory and requests for new services. Supervises and trains employees in billing, customer service and work orders. Enhanced operational performance and reduced labor expenses by developing and optimizing standard practices.

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Bookkeeper

DECEMBER 1999 - OCTOBER 2012

Inspected account books and recorded transactions. Reconciled accounts, managed audits and updated financial records with remarkable accuracy. Used knowledge of local laws to comply with reporting requirements. Reported financial data and updated financial records in ledgers and journals.

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Bookkeeper/Plants Records

DECEMBER 1998 - DECEMBER 1999

Matched purchase orders with invoices and recorded necessary information. Streamlined bookkeeping procedures to increase efficiency and productivity. Reviewed and filed financial documents, coded accounting entries for data processing, and posted daily receipts and payments in accordance with all company protocols.

Mora-San Miguel Electric Cooperative, Inc., Mora, New Mexico — Executive Administrator

SEPTEMBER 1997 - DECEMBER 1998

Developed monthly reports. Observed all laws, regulations and other applicable obligations. Managed day-to-day development issues. Represented company at conferences and seminars to boost outreach.

SKILLS

Cross-functional team management

Team management

Problem Resolution

Employee Development

Project Management

Monthly Reconciliations

MS Office Expertise

Effective Project Completion

Financial Records & Processing

Risk Management

Safety Procedures

Audit Preparation

OSHA Standards & Codes

Records Organization & Management

Hiring & Onboarding

Supplier Monitoring

Contract Negotiations



Professional Summary

Jason Trujillo

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AMI Network Supervisor, 08/2012 - Current - AMI Network Operations supervisor of all Meter Technicians within the organization. Performs technical review and acceptable testing for software and firmware upgrades for the AMI System and metering tools and equipment. Manages testing and approvals of the metering system and meter firmware upgrades. Manages, monitors, analyzes, troubleshoots and ensures timely repairs of the AMI System, network and associated equipment. Manages the day-to-day AMI System health issues and activities. Oversees and monitors AMI no-read reports, trouble tickets, high/low validation reports and makes recommendations. Addresses AMI communications issues. Monitors and analyzes AMI GIS shape files for problems. Troubleshoots and corrects as necessary. Responsible for tracking, coordinating, and reporting on the status and trends of issues and returns to the manufacturer for repair or replacement. Ensures that consumer issues related to the AMI and metering system are investigated and addressed in a timely manner. Ensures all meters are calibrated and reported accurately. Works with member services, IT, warehousing and all crew personnel to ensure the AMI system operates as needed.

Skills

- Advanced knowledge of utility revenue metering
- Knowledge of AMI powerline communications (PLC) network & associated components
- Knowledge of use of pivot tables and other software tools for data analysis
- Knowledge of telecommunications systems
- Knowledge of AMI system infrastructure and configuration
- Knowledge of meters and other communication system components.
- Knowledge of basic mechanical parts and operations of simple mechanical devices
- Knowledge of all local, state, and national codes and regulations regarding instrument metering
- Leadership Skills
- Strong organizational skills with attention to detail and accuracy
- Strong computer skills
- Strong analytical and problem-solving skills
- Ability to evaluate and recognize hazardous situations and respond and notify others appropriately
- CIS Application and General GIS Mapping knowledge

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SUMMARY OF QUALIFICATIONS

Broad understanding of the electric distribution cooperative model with emphasis on rates, billing, governmental affairs including tribal relations, line design, expansion and customer service.

- Tribal Liaison for more than a decade to 11 tribes in NW New Mexico.
- Wide-ranging experience with governmental agencies including but not limited to USDA/RUS, BIA, BLM, USFS, NMPRC, EIA, and eleven sovereign nations.
- Participated in three electric utility cost of service and rate making studies and countless rate reconciliations and filings.
- Worked closely with the local Navajo Nation Chapters to provide electric service to families.
- Extensive rate, regulatory and modeling knowledge with electric distribution systems including solar.

– Areas of Expertise –

Rate Making and Regulatory Compliance | Project Management | Tribal and Government Relations
Renewable Energy | Data Analytics and Reporting | Critical Thinking and Problem Solving

PROFESSIONAL EXPERIENCE

NEW MEXICO RURAL ELECTRIC COOPERATIVE ASSOCIATION

04/2023 to Present

Grant Program Manager

Research grant opportunities for electric cooperatives in New Mexico. Prepare applications with the utility and consultants.

T&D SERVICES, LLC, ALBUQUERQUE, NEW MEXICO

12/2022 to 04/2023

Project Representative

Primarily researched grant opportunities for Tribes, States, and electric utilities. Researched and wrote concept paper and Application documents for Mora-San Miguel Electric Cooperative, Inc. for the Grid Resilience, Innovation and Partnership grant application.

NEW MEXICO STATE, HOUSE OF REPRESENTATIVES SANTA FE, New Mexico

1/2023 to 3/2023

House Majority Research Analyst

Researched and wrote a report on each of the 44 bills presented to the Energy, Environment and Natural Resources Committee for the 56th legislative session of for the State of New Mexico.

JEMEZ MOUNTAINS ELECTRIC COOPERATIVE, INC., ESPANOLA, New Mexico

7/2002 to 10/2022

District Manager and Tribal Liaison (7/2021 to 10/2022)

Direct the operations of the Cuba district office comprised of 30 employees covering approximately 3,000 square miles of electric distribution line and 6,000 member accounts. Included outage management, new line construction and maintenance, fleet and warehouse operations, billing and collections and tribal relations.

Regulatory and Tribal Liaison/Project Management/Member Service (1/2014 to 10/2022)

Liaison for eleven Native American Tribes in NW New Mexico. Extensive collaboration with Navajo Nation Chapters, BIA and Navajo Nation Departments to expand electric service. Regulatory reporting including monthly and yearly rate reconciliation filings to the Public Regulation Commission. Data analysis and reports on billing and member history. Project lead on implementation for programs, equipment and procedures as

CARMEN CAMPBELL

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required for business continuation and/or process improvement. Member communication and notification using all methods available.

Turtle Administrator/AMR Technician/Training Coordinator/General Office Assistant (7/2002 to 2014)
Manage and monitor the overall performance of the automated metering system used to collect data for billing 31,000 meters. Identified problems and found solutions with the automated metering system. Implemented technical training for employees. Performed cashiering and billing functions.

PRIOR EMPLOYMENT

Prior to 7/2002

Ferrellgas, office manager and certified propane dispenser

Norwest Bank, branch manager in Dulce, NM

Village of Cuba, Water and Sewer System billing and collections clerk and New Mexico Motor Vehicle Division clerk (run by the Village).

PROFESSIONAL DEVELOPMENT

AAS Electric Power Technology, Bismarck State College | CPU Certificate Practical Regulatory Training and Ratemaking | Over the years used a hands-on project management approach working with contractors, consultants and vendors that led to learning the process and reducing costs. Worked with the best rate consultants and engineering firms in the country to complete cost of service studies, project design plans, long range financial forecasts, four-year construction plans, RUS loan applications, and system impact studies to name a few.

TECHNICAL PROFICIENCIES

Access Queries | Microsoft Office (Word, Excel, Outlook, PowerPoint, Access, Teams) | Billing and Cashiering Software | Meter Data Management Software | Mapping Software (ArcGIS online, Google Earth Pro)

VOLUNTEER WORK AND INTERESTS

Adopt-a-Highway and Community Clean-up Project Participant | Continental Divide Trail Coalition Gateway Community Ambassador | Continental Divide Trail Adopter | Help Maintain Local Walking Trails | Avid Day Hiker

REFERENCES

Joseph Sanchez, New Mexico State Representative District 40
New Mexico House of Representatives

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Eva Marie DeAguiro, Director of Member Service (Retired)
JMEC

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Rose Marie Law, Human Resource Manager
Tsay Corp.

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Adam Roybal, P.E.

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Professional Experience:

Senior Electrical Engineer with extensive experience in electric utility system planning; transmission and distribution systems design, construction, and operation; and electric utility management.

Transmission & Distribution Services, LLC, Albuquerque, NM

2018-Present

Division Manager, Transmission and Distribution Lines

Provides engineering consulting design and project management for all aspects of electric utility distribution systems. Direct and hands-on experience with day-to-day utility operations and vast familiarity with the management of utility system improvement, repair, and upgrade projects. Performed hundreds of miles of distribution system modeling to improve reliability and bring new load to systems. Experienced in the determination of specifications, settings, and installation of distribution equipment such as reclosers, regulators and capacitors. Expertise in evaluating utility distribution system performance through system modeling and studies and provides system planning and system analysis support.

Jemez Mountains Electric Cooperative, Espanola, NM

2016-2018

Engineering Manager

Provided engineering support, training, and mentoring to engineering staff and construction personnel. Improve the level of technical support and enhance internal engineering procedures to support an outdated system. Supervised the day-to-day operations of the meter department. Updated the engineering and mapping software and its integration with enterprise software. Worked with staff to provide information for all RUS requirements and forms. Provided operations support and oversaw the repair and maintenance of the aging infrastructure. Improved the tracking and development of joint-use programs; trained and supervised the staking department, engineering department, dispatchers, work-order clerks, supporting staff, and field crews on the use of equipment and new field software packages. Collaborated with all departments to meet and follow the requirements of board policies and RUS and provided support in the creation and updating of policies, rates, and PRC filings.

Xcel Energy (SPS), Roswell, NM

2007-2016

New Mexico Area Senior Engineer, Roswell, 2013-2016

New Mexico Area Staff Engineer, Roswell, 2011-2013

Distribution Design Engineer, Hobbs/Roswell, 2007-2011

Provided engineering support, training, and mentoring to engineering staff and construction personnel and promoted a high level of technical support internal groups and customers. Developed internal engineering procedures to support a fast-growing system and high-load demand. Refined technical and interpersonal skills while dealing with procedures, engineers, and other non-engineering groups. Performed hundreds of miles of distribution system modeling to assist in reliability and bringing new load onto the system. Experienced in the determination of specifications, settings, and installation checks of distribution equipment such as reclosers, regulators, and capacitors. Performed system modeling and contract checks to bring 100 megawatts of solar onto the distribution system.

Engineer in charge of Xcel's New Mexico territory system maintenance, reliability, and load growth. Directly involved with maintaining Xcel's system goals such as power factor, voltage level, voltage balance, and equipment ratings. Xcel transmission required a 98% power factor at the substation bus.

Based on a report of the power factor, voltage, and current levels at each substation, directed yearly projects to correct power factor, inspect capacitors, and make repairs. Calculated the amount of missing capacitance on the system by hand or utilizing Synergi software and placed capacitors at critical system locations to help boost voltage and as power factor correction. Managed the maintenance and adjustment of approximately 300 capacitors across Xcel's system.

Performed many studies to install capacitors on Xcel's growing oil field. Large loads required capacitors to maintain the power factor and support voltage to allow new connections. Several switched and several fixed capacitor banks were installed per feeder. This work was performed in conjunction with Xcel's oil company consumers' drives and existing or new capacitor systems.

Professional Registration:

Electrical Engineering, NM# 21100

Education:

BSEE, Specialty in Utility Powers, New Mexico State University, (b)(6)
Certification, Fire Fighting and Forest Management Programs, New Mexico Highlands University, (b)(6)

Software:

Full Microsoft Office suite including: Access, Excel, Word, Visual Basic, and Visio. Direct experience with Arc GIS Online, ETAP, Milsoft Windmil, Milsoft OMS, Milsoft Windmil Map, ArcMap, Partner Staking, Synergi Electric, GeoDigital, AutoCAD, SEDC, Small World GIS, S&C software, Eaton software, ABB software, Schweitzer Engineering software.



Robert Perea, P.E.

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Professional Experience:

Senior Electrical Engineer with extensive experience in electric utility system planning; transmission and distribution systems design, construction, and operation; and electric utility management.

Transmission & Distribution Services, LLC, Albuquerque, NM 2019 - Present

Division Manager Planning & Systems Studies

Expertise in evaluating utility distribution system performance through system modeling, power flow analysis, and system impact, feasibility, contingency studies and power flow, arc flash, and fault analyses. Experienced in ensuring and improving system reliability through the determination of appropriate specifications and settings of distribution equipment such as reclosers, regulators and capacitors. Responsible for project management including successful project execution and delivery of work meeting the client's cost, scope, schedule, and service expectations.

Xcel Energy, Roswell, NM

1995 - 2019

Manager, New Mexico Distribution Design Department, 2012-2019

Managed the distribution design engineering group in west Texas and southeastern New Mexico. Responsible for the design and maintenance of the electrical distribution system, including the growing oilfield in Eddy and Lea counties. Conducted staff meetings, addressed personnel matters including hiring, discipline, and guided the development of engineering staff in technical and business aspects of the company. Acted as subject matter expert for the design of electrical distribution grid. Responsible for approving projects and ensuring technical and economic accuracy, facilitating meetings for large project updates, and responding to customer needs.

Principal Specialty Area Electrical Engineer, 2006-2012

Supervised engineering group responsible for the analysis and resolution of all technical issues related to providing a safe and reliable electric power in west Texas and southeastern New Mexico. Responsible for mentoring staff with technical and professional development; ensuring an acceptable quality of power was provided to customers, conducted load study analysis for acceptance of large load additions, worked with intra-company departments to maintain and improve system reliability and to develop/implement effective distribution circuit protection schemes. Developed and implemented company process in New Mexico to safely interconnect distributed generation to the Xcel Energy distribution system ranging from small residential wind/solar to 10MW solar installation. Served as project manager for the 10MW installations.

Senior Area Electrical Engineer, 2002-2006

Responsible for the analysis and review of electrical distribution circuit issues in southeastern New Mexico and the Seminole, Texas area. Worked with internal resources and external customers to achieve desired results. Responsible for analysis and determination of improvements necessary for large load additions. Provided direction on compliance with corporate and industry standards along with technical support to distribution design and construction departments. Supported improvement of electrical system performance including circuit troubleshooting, equipment specification and placement, development and implementation of equipment settings, system

upgrades, and protection coordination. Developed switching procedures to address system capacity issues and to remove substations from service for required maintenance. Responsible for analysis and authorization of customer distributed generation interconnected with Xcel Energy system.

Team Lead, Distribution Design, 1995-2002

Supervised engineering group responsible for design and maintenance of the electrical distribution system in Roswell, New Mexico area. Provided technical support and approved electrical designs and estimates. Performed load flow and motor starting analysis. Provided foundation for new engineers in both technical and business aspects of utility industry. Responsible for investigating accidents involving public and company facilities.

Southwestern Public Services Company, Roswell, NM

1992-1995

New Mexico Operations Engineer, 1993

New Mexico Division Engineer, Distribution Design, 1992-1995

Professional Registration:

Electrical Engineering, NM# 16036

Education:

MSEE, Electric Utility Management Program, New Mexico State University, (b)(6)

BSEE, Emphasis in Power, New Mexico State University, (b)(6)

Professional Associations:

Co-chair, Xcel Energy Distribution Standards Committee, 2017-2019

Judge, Math Engineering Science Achievement, (MESA) State Competition, 2013-Present

Facilitator, Xcel Energy Lineman - Journeyman Exams, 2015-2019



Niel Miele, P.E.

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Professional Experience

Transmission & Distribution Services, LLC, Albuquerque, NM

October 2021 — Present

Project Manager, Station Engineering

Mr. Miele acts as Project Manager for the substation design team applying his skills in engineering leadership, electrical design, and strategic planning. He is senior engineer with 40+ years of experience with electrical engineering consulting and project management. He possesses both the technical expertise and business savvy to effectively communicate with clients, keep projects on track, and provide mentoring and leadership to project teams. He is well-versed with varied aspects of substation design including equipment layout, steel drawings, electrical clearances, QA/QC, best practices, and commissioning. Mr. Miele has experience with the development and execution of Engineer/Procure/Construct (EPC) contracts for utility and commercial clients.

Joule Engineering PLLC, East Norwich, NY

2020 — 2021

Principal

Principal Engineer of a boutique consulting firm specializing in professional electrical engineering and project management. Independent professional engineering consultant for the power and electronic industries offering technical expertise in conceptual/system design, value engineering, documentation/design review, program/project management, scheduling, client representation, on-site and remote conferencing, and business development.

PACS Switchgear LLC, Bethpage, NY/Mansfield, OH

2011 — 2020

Chief Engineer and General Manager

Managed all day-to-day operations for a global leader in the design and manufacture of medium voltage electric switchgear. Transitioned the firm from a small-family business to a medium-sized corporation. Provided technical leadership and transitioned the product into diverse markets. Spearheaded a plant-wide reorganization that facilitated revenue growth and productivity improvements and promoted an awareness of efficiency, project scheduling, detail, and quality control. Instituted a lean manufacturing program which streamlined critical plant processes and reduced capital expenditures to realize more than \$650k in annual cost savings and increased profit margins. Orchestrated a cultural shift within the organization empowering employees at all levels to become confident decision-makers.

Lockwood, Kessler & Bartlett, Syosset, NY

2001 — 2011

Vice President (2004 – 2011)

Senior Engineer/Department Head of Electrical Engineering (2001 -2004)

Oversaw the operation and development of the electrical and mechanical engineering divisions of an engineering consulting firm servicing the utility, transportation, and transit industries. Formulated, managed and executed multiple Engineer/Procure/Construct (EPC) contracts as both prime and subcontractor for EHV/HV/MV transmission and distribution systems. Expanded the company's offerings by establishing strategic initiatives, utilizing both in-house and third-party resources to acquire regulatory permitting and contracting for revitalization and new construction. Utilized the firm's technical diversity to capture High

Voltage Power engineering and construction programs from utility and municipal clients throughout metropolitan New York and New England.

EMS Development Corporation, Yaphank, NY

1998 — 2000

Vice President

Developed the engineering, research, development and manufacturing plans of a designer and manufacturer of specialized magnetic devices to target 100% revenue growth over five years. Streamlined the engineering and manufacturing processes to reduce manufacturing costs over the same period. Oversaw the engineering and manufacturing of DC power distribution systems for naval vessels.

Telephonics Corporation, Farmingdale, NY

1996 — 1998

Director, New Technology (1995 – 1998)

Product Line Director (1991 – 1998)

Program Manager (1986 – 1991)

Organized and led new technology initiatives and developed technologies for the GPS and digital communications markets of a manufacturer of integrated electronic systems. Proposed new GPS concepts to the Department of Defense. Developed engineering and production programs in commercial and military electronic systems with a staff of over 30 personnel. Chaired the ISO 9001 Engineering Process Improvement Team. Managed development, production, and service programs from engineering design through to site commissioning.

Professional Registration:

Electrical Engineering, NM#26507, NJ, NY, CT, NH, OH, PA, MD, OR

National Council of Examiners for Engineering and Surveying, Certified with International Record Book

LEED Accredited Professional

Education:

MBA, Adelphi University, Garden City, NY, (b)(6)

BSEE, Lehigh University, Bethlehem, PA, (b)(6)



Kenneth Adams, P.E.

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Professional Experience

Transmission & Distribution Services, LLC, Albuquerque, NM

October 2011 — Present

Director, Station Engineering

Mr. Adams manages the substation design team and applies his background and experience in substation design, protection and control schemes, project facilitation and client communications to bring about successful projects for a variety of clients. He is familiar with the many varied aspects of substation design including equipment layout, steel drawings, electrical clearances, QA/QC, best practices and recommended relay and controls scheme designs as well as commissioning. His experiences range from simple sectionalizing breaker stations to full 345kV ring bus developments. Fulfilling the role of engineer of record for multiple projects has allowed him to draw upon a unique group of team members and resources to facilitate completion of design packages for electric cooperatives, municipal utilities, IOU's, private corporations and renewable developers. Mr. Adams recently completed multiple EPC projects (engineer, procure and construct) for solar developments and start up tribal utilities.

Central NM Electric Cooperative, Inc., Moriarty, NM

January 2005 — September 2011

Director of Engineering and Operations

Oversaw day to day operations of twenty support services personnel including IT, staking, purchasing, mapping, work orders and meter reading including AMR functions. Supervised and performed design work in accordance with RUS construction and purchasing standards to meet NESC and NEC requirements and local engineering design requirements. Performed substation relay and control upgrades, metering installations and fault current/load flow studies including arc flash calculations and documentation. Trained and provided technical support for substation and distribution system best practices. Acted as project manager for substation and distribution construction projects. Performed investigations into customer complaints, failures, and other issues. Involved in cost of service and rate design from an engineering perspective.

SGS Witter/TRC Solutions, Albuquerque, NM

May 2001 — December 2005

Substation Protection Engineer

Designed relaying and control schemes for distribution and mobile substations, ring bus installations and metering/SCADA. Checkout and testing of new substation and distribution equipment for customers including energization of facilities and investigation of customer issues. Familiar with all aspects of distribution substation design including steel, foundations, clearances, best practices, and recommended relay and controls scheme design.

Dow Chemical Co., Freeport, TX

April 1995 — April 2001

Power Distribution Engineer

Motor starting studies, load tap changer replacements, 15kV and 2.4kV FUJI circuit overhauls including preparation of written procedures, evaluation of heat-shrink type splices for 2000 MCM distribution cable including thermal profiles while loaded at rated ampacity. Checkout and energization of 345kV circuit breakers including development and review of procedures for trip testing and proper function. Repair and re-energization of failed equipment and

systems from 480V to 345kV including re-synchronization of 15kV and 138kV systems and power generating facilities islanded during outages, equipment failures or storms. Assisted with day-to-day operations of a large industrial power system including large rectifier loads, multiple generation sites and sensitive customer loads. Responsible for maintaining the dispatching of one-lines for Dow's 345, 138 and 14.4kV systems.

Professional Registration:

Electrical Engineering, NM# 16008, AZ# 54612, UT# 13270659-2202, KS# 23538, NCEES# 49561

Education:

MSEE (Concentration on Power Systems), New Mexico State University, Las Cruces, (b)(6)

BSEE, New Mexico State University, Las Cruces, (b)(6)



George Nail

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Mr. Nail is an Electrical Engineer with over 50 years of experience in the electric utility industry. Mr. Nail has directed the technical aspects of severance and ownership transfer of several electric utility system assets and designed interconnecting equipment to facilitate the establishment of a new utilities for multiple clients. He also routinely assesses electrical infrastructure to enhance operations and maintainability.

Mr. Nail specializes in protection and control and the metering of distribution substations, transmission stations, and generating plants. He has considerable experience with 345kV, 230kV and 115kV switching stations, substations and large power plants including the design of electrical print sets from one-line diagrams to panel connection diagrams.

To assist utilities with system performance, Mr. Nail performs fault studies and relay coordination studies for distribution and transmission systems. He also has substantial experience in power flow, stability and network analyzer studies. His long-term utility planning expertise includes feasibility studies and system inventories, assessments, and modeling.

Mr. Nail is directly responsible for the commissioning of new stations and for directing trouble-shooting efforts on existing stations. He frequently works in energized stations alongside field personnel and utility system operators. He teaches engineers and field personnel how to operate and test new protection equipment.

Mr. Nail is an active member of the Institute of Electrical and Electronics Engineers and served as a past Chairman of the Power System Relaying Committee. He is also a past President of the Albuquerque Chapter of the New Mexico Society of Professional Engineers. Mr. Nail is a nationally recognized expert frequently retained to testify on technical issues.

Professional Experience

Transmission & Distribution Services , Albuquerque, NM	2007 – Present
Principal and Director of Protection and Controls	
SGS Witter, Inc. , Albuquerque, NM	2000 – 2006
Vice President and Chief Operating Officer	
Robert Witter & Associates , Albuquerque, NM	1988 – 2000
Protection and Control Engineering Design and Application	
Public Service Company of New Mexico (PNM) , Albuquerque, NM	1964 – 1988
Supervisor of System Protection Engineering	

Education

BSEE, New Mexico State University, Las Cruces, NM, (b)(6)

Active registrations/certifications: Electrical engineering PE licensure

Texas#101438	Oklahoma#32020	Nevada#9347
New Mexico#16008	Utah#278535	Oregon#93831PE
Arizona#54612	California#17149	Minnesota#57685
Colorado#26912	Kansas#16687	



Tim McLellan, P.E.

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC

May 2008 - Present

Electrical Engineer

Responsible for transmission and distribution line projects and design services. Responsibilities include design review and checking, staking sheets, plan and profile maps, and structure drawings, and compiling materials lists all in accordance with relevant standards. Prepares construction contracts for bid requests, conducts bid openings, pre-bid meetings and bid reviews. Performs on-site reviews throughout construction to ensure construction is to specification and relevant standards. Prepares closeout documentation upon project completion.

Sandia National Laboratories, Albuquerque, NM

March 2007 – December 2007

Student Intern

Employed in the Light Labs department of the MESA complex running experiments on thermal emission of various materials. FTIR spectroscopy was utilized to measure the emissivity of silicon, and photonic crystals. Participated in a research paper submitted to the Photonics and Nanostructures Journal.

Kemtah Group, Albuquerque NM

Summer 2006

PC Technician

Contractor hired to assist with large personal computer replacement project throughout Presbyterian Hospital. Imaged older personal computers and restored data and applications on new computers. Installed and configured MS Windows 2000 and XP and installed hospital software for doctors, nurses and ancillary personnel.

TEK Systems, Albuquerque, NM

Summer 2005

PC Technician

Eight weeks of contract work was completed for the USDA Forest Service consisting of malware removal from government computers. Used Tivoli remote access software, MS Antispyware, and Norton Antivirus to detect and clean spyware and viruses from infected computers nationwide over Forest Service network.

Professional Registration:

Electrical Engineering, NM# 22753; AZ# 67841

Education:

BSEE, University of New Mexico, Albuquerque, NM, (b)(6)

BS Chemistry/Biology, Eastern New Mexico University, Portales, NM, (b)(6)



Joshua Earle, P.E.

(b)(6)

(b)(6)

Professional Experience:

Senior engineer with over ten years of technical experience including power system analysis, aging, and planning including RUS Construction Work Plans and Long Range Plans, renewable energy feasibility, protective device coordination, arc flash analysis, and distributive energy resource (DER) interconnection studies. Design experience includes substation, protection and control systems, generation, SCADA, protective relay settings, and communications. Field engineering experience includes substation commissioning, test and checkout of protection and control schemes, as-built, and test and checkout of SCADA RTU and communications systems.

Transmission & Distribution Services, LLC, Albuquerque, NM

2019-Present

Senior Electrical Engineer

Protection & control system design, SCADA & automation system design, protective relay settings programming, SCADA RTU programming, electrical system analysis, and protective device coordination.

NV5, San Diego CA

September 2017 to July 2019

Group Leader

Team utilization, project management, technical leadership, project proposals, team development, specifications, quality assurance and quality control (QA/QC), and client development.

Transmission & Distribution Services, Albuquerque NM

June 2012 to August 2017

Substation Engineer III

Engineering mentor, lead protection and control and SCADA engineer, field service engineer, substation commissioning, QAQC, specifications, and client development

Exponential Engineering Company, Cortez CO

May 2009 to June 2012

Electrical Engineer II

System modeling, protection and control engineering, arc flash analysis, aging and load forecasting studies, device coordination, QAQC, short circuit analysis, and client development.

El Paso Electric, El Paso TX

July 2008 to May 2009

Substation Intern

Dow Chemical Company, Freeport TX

Summer 2007

Power System O&M Intern

Professional Registration:

Electrical Engineering, NM #12600, AZ #54668, CA #22369, CO #47093

Education:

MSEE, Electrical Utility Management Program, New Mexico State University, (b)(6)

BSEE, Power Emphasis, New Mexico State University, (b)(6)

Technical Skills:

Microsoft Office Suite, MathCAD, AutoCAD, SKM Power Tools, AcSElerator, OrionLX RTU, Synergi Electric, Milsoft WindMil

Professional Affiliations:

IEEE Power Energy Society

IEEE Power System Relaying and Control Committee



Aaron Greiner, P.E.

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

January 2012 – Present

Electrical Engineer

Mr. Greiner is an Electrical Engineer in the stations group with expertise in utility system reliability and protection and controls methodology and equipment. He also has utility system planning and system studies experience. His expertise includes system modeling and protection, power flow and fault analyses, preparation of RUS construction work plans, protective device coordination studies, arc flash studies, distributed generation system impact studies and ad hoc system analysis reports for electrical cooperatives, investor owned utilities and municipalities. He is experienced in the use of Milsoft's WindMil®, Milsoft's LightTable and DNV GL's Synergi electrical system engineering analysis software for distribution system studies. He is trained in the use of GE's PSLF transmission network analysis software for transmission system studies.

Intel Corporation, Albuquerque, NM

February 2011 – December 2011

Student Researcher/Intern, Energy and Sustainability Research Lab

Designed and implemented demonstration units for trade shows. Designs based on the desire to use DC distribution within buildings and data centers. Wrote code for data collection and analysis for a home energy management system and characterized performance of a 10kW solar array.

Tucson Electric Power, Tucson, AZ

May 2010 – August 2010

Substation Engineer Intern

Assisted in the various aspects of planning, building and upgrading electrical substations for distribution and transmission systems. Checked and verified as-built drawings. Assessed lead times for materials and equipment needed for upcoming projects and verified material lists.

Professional Registration:

Electrical Engineer, NM# 25967

Education:

MSEE (Concentration on Power Systems), New Mexico State University, Las Cruces, (b)(6)

BSEE, New Mexico State University, Las Cruces, (b)(6)



Paul J. Cote, P.E.

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

2015 – Present

Senior Electrical Engineer

With 40+ years of engineering experience in distribution and subtransmission system analysis and planning, Mr. Cote makes system improvement recommendations using Milsoft's WindMil, DNV GL's Synergi and PLSF electrical system engineering analysis software, prepares short and long-range electric system expansion plans, evaluates distribution system impacts of proposed photovoltaic facilities up to 10MVA, and prepares reports.

Area Study: Evaluate Synergi model to determine distribution system deficiencies and develop the required upgrades to eliminate violations in normal and contingency scenarios. Recommendations were made for the most economical solutions. Project growth on the system to determine when the determined solutions are no longer effective. Determine optimal location for substation, including layout of the new distribution feeders.

Synergi Contingency Studies: Evaluation of substation outages to confirm effective switching procedures to serve all load and meet all operating criteria. Determination of required upgrades to eliminate any system operating violations during contingency situation.

Synergi PV Supplemental Reviews: Analyze model to determine if there are any thermal, voltage or flicker issues due to the proposed interconnection. Develop necessary system improvements to allow the interconnection if violations are determined.

Public Service Company of New Mexico (PNM), Albuquerque, NM

1977 — 2015

Distribution Planning Engineer, 1979 - 2015

Recommended subtransmission and distribution system improvements, including new lines, reconductoring, and substations, to accommodate expected growth covering normal and contingent conditions based on capacity, voltage constraints. Developed substation transformer loading criteria enabling the delay of substation construction and resulting in significant savings. Recommended voltage conversion from 4.16kV to 12.47kV for operating division based on short- and long-term considerations. Prepared direct testimony and testified before the Public Regulatory Commission regarding a new 115kV line and substation. Supported Economic Development Department by determining customer system impacts, meeting with prospects and representative engineers to discuss system impacts; developing alternative solutions; and performing analysis. Oversaw the planning and expansion of a 480V network; assisted construction personnel in determining new customer service needs and system design; and met with customers to understand their needs, outline system service requirements, and develop temporary, short-term, and long-term service solutions. Acting Distribution Planning Department Manager, for five months, responsible for directing department work flow, employees, and budget.

Power Plant Engineer, 1977 - 1978

Managed maintenance, performance and improvements for several natural gas and oil-fired power plants. Responsible for all power plant electrical and annunciator alarm systems and providing design for a new annunciator alarm. Instructed the Power Plant Apprenticeship Program class, *Math and Hydrogen Seal Oil*.

Professional Registration:

Electrical Engineering, New Mexico, #8734

Education:

BSEE (Power Systems Emphasis), New Mexico State University, Las Cruces, New Mexico; (b)(6)

Professional Affiliations:

Member, Institute of Electrical & Electronic Engineers (IEEE)



Jorge Garza

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

2017 – Present

Professional Electrical Engineer in Planning Division

Electrical Engineer assigned to T&D's electric system planning and analysis team. Responsibilities include system modeling, power flow and fault analyses, preparation of RUS construction work plans, long range plans, protective device coordination studies, arc flash studies, distributed generation system impact studies and ad hoc system analysis reports for electrical cooperatives, investor-owned utilities and municipalities. Experienced in the use Milsoft's WindMil®, Milsoft's LightTable and engineering analysis software for distribution system studies. Prepares arc flash studies, construction work plans, long range plans, coordination studies and protection and control design/implementation.

Synergi Electric Distributed Energy Resources Analyses: Analyses of approximately 18MW of photovoltaic Distribution Energy Resources to ensure safe and effective interconnections. The analysis includes evaluation of the base case with existing generation to ensure an effective model. The proposed generation is studied to determine if the site can be added, with or without upgrades. If violations exist, required upgrades are determined to ensure voltage, loading, voltage fluctuation, fault current, and islanding concerns are addressed.

Synergi Contingency Studies: Evaluation of substation outages to confirm effective switching procedures to serve all load and meet all operating criteria. Determination of required upgrades and supplementary switching procedures to eliminate any system operating violations during contingency situation.

Synergi PV Supplemental Reviews: Create and analyze minimum and maximum daylight load models to determine if there are any thermal, voltage or flicker issues due to the proposed interconnection. Develop necessary system improvements to allow the interconnection if violations are determined.

Peak Load Synergi Model Builds: Create Synergi models using metering data and VVMS capacitor status and analyze the models for projected peak load to evaluate existing system thermal, voltage and imbalance issues.

PV Pre-Application Report Studies: Analyze pre-determined PV locations, using Synergi models and ArcFM mapping, for capacity limitations due to conductor or feeder rating capacity.

Capstone Design, Klipsch School of Electrical and Computer Engineering New Mexico State University, Las Cruces, NM

Teaching Assistant / Research Assistant

2016 – 2017

Created design for NMSU's Microgrid connecting a critical building to island generator; also created an Arc Flash program. Supervised installation of design critical 2500kVA and 2000kVA transformer.

Student Assistant

2015 – 2017

Analyzed a circuit board including relays and LEDs. Created a motor startup protection algorithm for lab equipment.

Fundilac Industries, S.A. de C.V.

Summer 2016

Reversed engineered lighting controls to create a new version.

Professional Registration:

Electrical Engineering, NM#27458, TX# 142499

Education:

BSEE and Supplementary Major in Applied Mathematics, New Mexico State University, (b)(6)

Skills:

Synergi, Milsoft's WindMil®, Milsoft's LightTable, MatLab, MathCAD, PowerWorld, Microsoft Office, Arduino, Python, and Power Systems

Honors and Activities:

E-Council Representative, New Mexico State University, Gamma Chi Chapter of Eta Kappa Nu (HKN)
Treasurer, New Mexico State University IEEE College Chapter
Crimson Scholar, New Mexico State University



Katherine Gallegos, PLS, CFedS, MPS GIS

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

April 2007 — Present

Professional Land Surveyor/Right-of-Way Specialist

Ms. Gallegos has 15 years of surveying experience and became a licensed surveyor in the State of Arizona in 2012 and New Mexico in 2014. She is a Certified Federal Surveyor (CFedS) and obtained a Master's Degree in GIS in (b)(6). Ms. Gallegos is a right-of-way specialist with vast experience in preparing right-of-way maps, Bureau of Land Management permit applications and state highway crossing permits. She is proficient in downloading data from field crews and converting it to state plane coordinates. Her additional responsibilities include: field data reduction and oversight, developing plan and profile sheets for transmission and distribution line design, and preparing staking sheets for distribution and transmission line construction. Ms. Gallegos acts as lead surveyor and project manager on a variety of surveying projects. She is adept at managing surveying field crews, keeping projects on schedule and within budget, and communicating with clients.

Ms. Gallegos works directly with clients, schedules and provides field support for field survey crews. Prepares shapefiles, KMZ and GIS models from survey data. Prepares legal descriptions, permit maps and plats; centerline descriptions; generates plan and profile drawings, provides sag and tension data, and develops cold curve to check for uplift using LP SAG. She also verifies Rural Utility Service standards of power line drafting are utilized and provides oversight of submitting permits to different agencies.

SGS Witter, Inc., Albuquerque, NM

August 2000 – April 2007

Technician

Ms. Gallegos assisted in drafting and submitting permit maps. AutoCAD was the primary software used during her first year of employment. She then graduated to Land Desktop and All Topo Maps. Utilizing the software, she learned not only to download GPS points into the program and make the maps from the points, but also to create Plan and Profile Drawings. These drawings were used mainly in road or utility crossings and also in aiding with the design of the power line. She also created and reviewed staking sheets. Ms. Gallegos completed several classes, including NM Easements: Right of Way & Other Encumbrances by Walter G. Roillard; Surveying I – The Basic Course at Texas A&M University – Corpus Christi taught by Ken Gold; New Mexico Rural Electric Cooperative Association (b)(6) Staking School; and Phases I, II, and III of Hi Line Engineering, LLC's Staking Technician Certification Program.

Professional Registrations (Licensed Professional Surveyor) and License Numbers:

Arizona # 53472

New Mexico # 22500

Utah # 11648453-2201

CFedS # 1602

Academic Background:

MPS GIS, Northeastern University, Boston, MA, (b)(6)

BS Geology, University of Massachusetts, Amherst, MA, (b)(6)

Ohio Wesleyan University, Delaware, OH, (b)(6)



Frank Gibbons, PLS, CFedS

Professional Experience

Transmission & Distribution Services, LLC — Albuquerque, NM February, 2014 — Present

Professional Land Surveyor

With 35 years of experience in surveying, Mr. Gibbons is a Licensed Surveyor in Colorado, New Mexico, and is a Certified Federal Surveyor. He is experienced in historical resurveys, large control networks, state plane coordinates, public land surveys, route surveys, Aerial Mapping, road and subdivision design. His specialties include historical resurveys, litigation, and providing expert testimony. Due to his expertise in identifying evidence, boundary control, and legal principles, he has testified as an expert in numerous Court cases. He has also lectured for the Southwest Colorado Bar Association.

Mr. Gibbons has extensive experience in construction surveying, and route surveying. He gained this experience as the assistant County Engineer with La Plata County, CO.

His long experience in New Mexico has given him a firm background of the surveying issues and history unique to the area.

Professional Registrations (Licensed Professional Surveyor) in the following States:

<u>State</u>	<u>Licensing Number</u>
Colorado	23498
New Mexico	10473
CFedS	1298

Academic Background:

Mr. Gibbons studied engineering and surveying at Ft. Lewis College in Durango, CO.



Aaron Chavez

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services LLC, Albuquerque, NM

2016 — Present

Electrical Engineer

Assists in protection and control aspects of substation design, High Voltage electric system relay and protection schemes, SCADA systems and communication interfaces for substations. Experience encompasses all aspects of Protection and Control design including one-line development, relaying scheme design, physical connection diagrams and relay panel design, QA/QC processes, and relay settings development. Performs system analyses, system modeling, and protection coordination studies and adept at system troubleshooting and recommending system improvements.

Pacific Northwest National Laboratory, Richland, WA

2019 — 2021

Electrical Engineer

Conducted resilience analysis of energy infrastructure systems supporting military installations. Leveraged utility operations background to support proposals of realistic infrastructure improvements. Translated analysis and recommended infrastructure improvements into reports for a non-technical audience. Maintained effective networking relationships across groups and directorates.

El Paso Electric, El Paso, TX

2015 — 2016

Distribution Systems Monitoring Intern

Complied load reports for all substations in the Las Cruces, NM area. Observed and assisted engineers with troubleshooting voltage problems. Participated in switching and protection coordination reviews. Modeled feeders in ETAP for coordination studies. Ran reports of capacitor banks in ArcGIS to check accuracy.

Los Alamos County Utilities, Los Alamos, NM

Summer 2013

Student Intern

Assisted engineers in design of system improvements. Developed switching procedures for operations personnel. Studied basics of electrical distribution systems mentored by a senior field engineer.

Professional Registration:

Passed New Mexico Professional Engineering Licensing Exam 2021, license pending

Passed Fundamentals of Engineering Exam, January 2015

Education:

MSSE, Emphasis in Power Systems, Demand Response, New Mexico State University, (b)(6);

Relevant coursework: Distribution Systems, Public Utility Regulation; System Protection

BSSE, Emphasis in Power Systems, New Mexico State University, (b)(6); Relevant coursework:

Power Systems 1, 2 & 3, Systems Engineering

Technical Skills:

ETAP, ArcGIS, EnterVista, AutoCAD, MATLAB, MathCAD, Microsoft Office Suite



Jose Olivarez

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

2022-Present

Electrical Engineer, Distribution Lines

Mr. Olivarez assists the Distribution Lines and Transmission Lines divisions with site selection review and the layout and design of new lines and the upgrade of existing lines for rural electric cooperatives and municipal electric utilities. Experience also includes field work and work order review.

Sierra Electric Cooperative, Elephant Butte, NM

2021-2022

Electrical Engineer, Distribution Systems

Worked on data integration across various Utility platforms such as ArcGIS, Milsoft WindMil, Aclara TWACS (Smart Meters, MDMS) and NISC (Inventory, Billing, OMS) software. Utilized Milsoft WindMil and Light Table to perform sectionalizing studies, voltage drop and power factor analysis, and assisted with the development of system upgrades and capital projects for long-range Construction Work Plans. Responsible for processing, reviewing, and approving member Interconnection Agreements. As a part of the process, coordinated with contractors, members, state inspectors, enforced SEC standards and procedures, and reviewed one-lines, equipment specifications, load calculations, etc. Troubleshooted and coordinated work to resolve consumer power quality problems. Utilized PMI products such as ProVision software, Guardian and Revolution Recorders to analyze and recommend solutions regarding power quality concerns. Participated in monthly board meetings, reviewed and developed reports regarding feeder and substation loading, energy losses, and energy supplier usage data and billing. Knowledge of IEEE, NFPA/NEC, RUS Bulletins, and other applicable codes and regulations to ensure that the Cooperative's facilities are designed, constructed, and operated in a safe and efficient manner. Performed an Advanced Metering Infrastructure (AMI) feasibility and cost/benefit study, analyzing Cooperative expenses, assessing, and forecasting of Return on Investment, and analysis of performance measures of AMI network and SEC requirements. Coordinated and interfaced with Cooperative and AMI vendors in collecting data for AMI presentation and final report.

The Electric Company (El Paso Electric), El Paso, TX

2021

Electrical Engineer, Distribution Systems

Developed and implemented control settings for reclosers, capacitors, and regulators. Coordinated work with linemen to perform load balancing, maintenance distribution equipment, supervise the commissioning of distribution equipment and troubleshoot consumer voltage concerns. Developed and reviewed Switching Orders. Coordinated and monitored the completion of Switching Orders. Performed field work to collect feeder data, modify distribution equipment settings, verify GIS mapping, and monitor project progress. Utilized ETAP and ASPEN software to perform coordination studies. Assisted with the development of over-current coordination and over-voltage protection philosophies. Coordinated the collecting, investigating, validating, and processing of data on customer service interruptions and system outages. Performed routine power quality (PQ) studies and investigations regarding customer voltage levels and flicker.

Responsible for assigned are of town, ensuring the Service Betterment Capital Projects are specified, budgeted, designed, and constructed on time on a yearly basis. Provided support to the distribution dispatch section for restoration of power during outages and collect and analyze data.

Sargent and Lundy, Glendale, AZ

2019-2020

Electrical Engineer, Nuclear Power Group

Coordinated and collaborated with managers, electrical designers, and other disciplined engineers in supporting the completion of revised drawings, calculations, bill of materials, work orders, and to produce comprehensive project reports/spreadsheets for departmental staff meetings. Utilized ETAP to generate, evaluate, and verify field results and electrical hand calculations related to common power plant equipment such as transformers, circuit breakers, batteries, chargers, and uninterruptible power supplies (UPS). Supported and interfaced with Arizona Public Service and various contractors with the development, modeling, and assessment of various projects. Performed engineering evaluations and design functions including equipment selection, system sizing, product specifications, and design layouts for power plant facilities and electrical systems. Collected, updated, and maintained pertinent equipment data onto organizational record systems/database. Provided support in revising and analyzing various wiring, single-line, and elementary drawings/schematics. Prepared and supported the development of project deliverables such as Bill of Materials (BOM), Design Change Package, Impact Review Packages (IRFs) and other design inputs under the supervision of the senior electrical lead.

Professional Registration:

Passed NCEES FE Examination: Electrical and Computer

Exam date: May 2019

Registered with Texas Board of Professional Engineers and Land Surveyors: EIT# 72843

Education:

MSEE, New Mexico State University, in progress, (b)(6)

BSEE, New Mexico State University, (b)(6)

Related Classwork Experience: Power Systems III, DC/AC Circuit Analysis, Systems Engineering, Electronics, and Electromagnetics

Additional Skills:

In-depth knowledge and demonstrated proficiency with electrical engineering software: Milsoft WindMil and Light Table, ETAP, Cooper Systems' ProView, PMI's ProVision

Working knowledge of: ASPEN, SEL's SynchroWave and AcSElerator, NISC Utilities (Inventory, Billing, OMS), MATLAB, Mathcad

Problem-solving skills with the ability to analyze and effectively communicate recommended solutions.

Extensive knowledge of Microsoft Office (Outlook, Word, PowerPoint, Excel, Access Database) in creating and manipulating pivot tables, formula functions, formatting & page setup, and calendar management.



Stefan Ketcham

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

January 2015 – Present

Civil Engineer

Designs grading and drainage plans, utility expansion and upgrade plans, and storm water runoff management plans for a variety of engineering projects. Underground trench design, single, double and three-phase distribution lines and transmission line design. Preparation of bidding documents and specifications, conducted pre-bid and bid opening meetings, review of bids for award, contract preparation, project management, construction administration and closeout. Procurement of steel and wood poles, both H-frame and single pole structures, and related materials, communication with vendors, and review and approval of invoice.

Professional Registrations:

Engineer Intern, New Mexico, passed the Fundamentals of Engineering (FE) Exam, 2018

Academic Background:

BS Civil Engineering, New Mexico Institute of Mining and Technology, Socorro, NM, (b)(6)

Technical Skills:

PLS-CADD, AutoCAD, MS Office

Sample Project Experience:

Taos Ski Valley Joint-Use Underground Power Project, Taos, NM

Underground trench design, electric powerline design, contract preparations, materials procurement, construction management, invoice review and approval for approximately eight miles of underground utility trench including electric power, gas, and communication lines and replacing existing overhead powerline to provide increased capacity for expansion of Taos Ski Valley resort, provide natural gas to replace propane, and provide improved communications facilities to the ski valley community. The route followed a canyon highway and presented many challenges during construction.

Ash Canyon Rebuild Project, Elephant Butte, NM

Distribution line design, steel pole procurement, contract preparation, bidding, award, construction management and closeout for rebuild of 6 miles of single, double and three phase distribution line. New design incorporated double circuit construction using steel and wood structures, both H-frame and single pole structures, over rugged terrain and a large highway/canyon crossing.



Chip Gregg

(b)(6)

Professional Experience

Transmission & Distribution Services, LLC, Albuquerque, NM **September 2019 – Present**
Civil Engineer

Mr. Gregg designs grading and drainage plans, utility expansion and upgrade plans, and storm water runoff management plans. He assists with transmission and distribution line design.

Forsgren Associates, Albuquerque, NM **2017 – 2019**
Civil Engineering Technician

Calculated draining and prepared cost estimates for NM State Land Office. Ensured compliance with NMED notification requirements. Designed and composed cost estimates for alternatives for Grants WWTP. Design septic systems for Hopi Housing Authority. Calculated drainage for Mescalero Hospital Addition. Edited and submitted CCR to NMOSE for Springer Dam Rehabilitation Project. Drafted bid documents per CDBG requirements. Drafted O&M Manual for Springer WWTP Addition. Prepared and edited bidding documents and specifications, attended pre-bid meetings, prepared soil and drainage reports for various projects.

Central New Mexico Community College, Albuquerque, NM **2015 – 2017**
Biology Lab Aide (Federal Work Study)

Teamed with Lab Techs to set up, tear down, and clean labs including biology, microbiology, physics, and chemistry. Performed weekly and monthly safety checks. Repaired tools, equipment, models, plumbing, and lighting.

Academic Background

BS Civil Engineering, New Mexico Institute of Mining and Technology, Socorro, NM, (b)(6)

Engineering Associate of Science, Central New Mexico Community College, (b)(6)

Certifications

Passed the Fundamentals of Engineering (FE) Exam, 2019

Skills and Coursework

AutoCAD, HEC-RAS, SAP-2000, Revit
Concrete Design
Soil Mechanics and Lab
Minimum Design Loads (Buildings)

Finite Elements
Open Channel Flow
Infrastructure
Introduction to Environmental Engineering



Kyle Padilla

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

August 2010 – Present

Graduate Electrical Engineer

Mr. Padilla is a member of the Planning and Systems Studies division. His responsibilities include system modeling, power flow and fault analyses, preparation of RUS construction work plans, long-range plans, protective device coordination studies, arc flash studies, feasibility studies, system impact studies and ad hoc system analysis reports for electric cooperatives, investor-owned utilities and municipalities. He has also performed field inventory of electric devices.

Mr. Padilla has significant experience and specialized training in the use of Milsoft's WindMil and LightTable and Synergi electrical engineering analysis software for distribution system studies. He conducts classes in the benefits and features of the above software and provides training in the use of analysis software to electric cooperative staff.

Synergi Electric Distributed Energy Resources Analyses: Analyses of approximately 30MW of photovoltaic Distribution Energy Resources to ensure safe and effective interconnections. The analysis includes evaluation of the base case with existing generation to ensure an effective model. The proposed generation is studied to determine if the site can be added, with or without upgrades. If violations exist, required upgrades are determined to ensure voltage, loading, voltage fluctuation, fault current, and islanding concerns are addressed.

Ball Aerospace, University of New Mexico, Albuquerque, NM

August 2009 – May 2010

Student Intern

Participated in Satellite Data Compression Algorithm. Utilized software and hardware for use of algorithm to increase efficiency in compression of satellite weather data transmitted to earth.

Education:

BSEE (Concentration in Communications), University of New Mexico, Albuquerque, NM, (b)(6)

Project Experience:

Coordination Analysis

- Completed Coordination Analysis for Mora-San Miguel Electric Cooperative, Otero County Electric Cooperative, Central New Mexico Electric Cooperative, Socorro Electric Cooperative, Continental Divide Electric Cooperative, Jicarilla Apache Nation Power Authority, City of Safford, Sierra Electric Cooperative
- Assisted in Coordination Studies for the Navajo Tribal Utility Authority

Arc Flash Hazard Analysis

- Completed Arc Flash Hazard Analysis for Springer Electric Cooperative, City of Safford, Socorro Electric Cooperative

Relay Programming and Commissioning

- SEL relay programming and commissioning of various relays including single-phase operation: 351, 751, 651R
- Cooper relay programming and commissioning
- Completed automatic transfer scheme to backup generation at White Sands Missile Range using SEL351
- Completed relay settings for Jicarilla Apache Nation Power Authority Dulce Substation during planned transmission line outage and connected to backup generation
- SEL event data review

System Impact Studies (PV and Battery DER)

- Completed system impact studies of PV and battery DER utilizing Milsoft software ranging from 1MW – 15MW for Kit Carson Electric Cooperative, Continental Divide Electric Cooperative, Central New Mexico Cooperative
- Completed PV system impact studies or PV DER ranging from 1MW – 5MW utilizing Synergi Electric software for Xcel Energy

System Modeling and Inventory

- Modeled electric distribution system for the City of Truth or Consequences, NM and conducted several studies to improve its electric system
- Modeled electric distribution system for the City of Safford, AZ and conducted several studies to improve its electric system

Construction Work Plans

- Completed Construction Work Plans for Otero Electric Cooperative, Mora-San Miguel Electric Cooperative, Swisher Electric Cooperative, Continental Divide Electric Cooperative and Kit Carson Electric Cooperative

Long Range Work Plans

- Completed Long Range Plans for Roosevelt County Electric Cooperative, Mora-San Miguel Electric Cooperative, and Continental Divide Electric Cooperative

Power Quality Investigation

- Completed power quality investigation analysis for Continental Divide Electric, Socorro Electric Cooperative, Town of Taos using a PMI recorder

Skills:

Synergi, Milsoft's WindMil®, Milsoft's LightTable, SEL AcSELerator, PMI Provision, Microsoft Office

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

January 2019 - Present

Graduate Electrical Engineer

Mr. Ordunez works with T&D's electric system planning and analysis team. His responsibilities include system modeling, power flow and fault analyses, preparation of RUS construction work plans, long range plans, protective device coordination studies, arc flash studies, distributed generation system impact studies and ad hoc system analysis reports for electrical cooperatives, investor-owned utilities and municipalities.

Detailed Summary:

- RUS Construction Work Plan: Engineering analysis in WindMil - forecasting load for four years to ensure RUS voltage, and capacity requirements are met. Proposing system upgrades to meet RUS requirements, estimates provided for proposed system upgrades, and a total loan amount provided to clients.
- RUS Long Range Plan: Engineering analysis in WindMil – forecasting load for twelve years to ensure RUS voltage, and capacity requirements are met. Proposing system upgrades to meet RUS requirements, estimates provided for proposed system upgrades, and a total loan amount provided to clients.
- Load Forecast: Forecasting energy and demand needed for a projection of twelve years, based on the last five years of sold and purchased energy, and demand.
- Synergi Electric Distributed Generation Analysis up to 27.786MW with power factor recommendations and system upgrades to ensure voltages are within ANSI C84.1 Range A, capacity requirements, voltage fluctuation, and fault current analysis.
- Synergi Electric Distributed Generation Analysis of non-exporting rotating generation. Contingency switching of loss of the rotating generation, loss of large loads onto circuit of the rotating generation. Voltage analysis, capacity percentages, and voltage fluctuation analysis, to ensure ANSI C84.1 voltage requirement is met, client voltage flicker requirements are met, and capacity requirements are met.
- Milsoft WindMil Analysis of load studies, including a proposed 1500 Horse Power motor ensuring RUS voltage, and capacity requirements are met. Analysis of the effect of motor starting to the primary distribution system.
- Milsoft WindMil and LightTable Fault Current and Coordination Analysis.
- Milsoft WindMil Distributed Generation Analysis up to 15MW with power factor recommendations and system upgrades to ensure voltages are within ANSI C84.1 Range A, capacity requirements, voltage fluctuation, and fault current analysis.
- Milsoft WindMil Analysis of N-1 contingency outage of a substation transformer. Develop switching procedures, ensure ANSI C84.1 voltage requirement is met due to the N-1 condition, ensure capacity requirements are met. Recommend capital system improvements for long-term N-1 contingency outage situations.
- Milsoft WindMil Model Build: From a raw .csv file to a working model for power system analysis.

- Analyze substation load data to incorporate a capacitor control scheme to improve power factor due to Distributed Generation being present.
- Working knowledge of ArcGIS/ArcGIS Online.
- Field experience with overhead powerline structures, phasing overhead powerline structures, phasing underground junction boxes.
- Moderate working knowledge of SEL relay settings file. Overcurrent time and instantaneous variables, timer variables, under/over voltage variables, and other various components of the SEL relay settings file.
- Field experience working with the SEL-651R and SEL-351RS recloser controls. Connect to relay using appropriate form of communication in the SEL software, read existing settings file in the relay, use of terminal command to obtain variable asserts/de-asserts, status of breakers, metering data, and event reports. Write settings file into relay.

Urban Electric Power/Sandia Labs, New Mexico State University, Las Cruces, NM

Student Assistant

Fall 2018

Data acquisition of new battery storage to be utilized in a smart grid application.

INCA NMSU: Electrical Power System Team

Fall 2017 - May 2018

Design and manufacturing of solar panels to provide loads for a nanosatellite in space with the use of a MPPT tracker.

Education:

BSEE with a Concentration in Power System Engineering, New Mexico State University, (b)(6)
Electric Utility Course Experience: Power Systems 1, 2 and 3; Distribution Systems; Capstone Power Lab 5.0

Skills:

Milsoft WindMil Power System Distribution Modeling Software, Synergi Electric Power System Distribution Modeling Software, Milsoft LightTable Fault Current and Coordination Analysis Software, Geographic Information Systems (GIS) in ArcGIS, Power System Analysis, PowerWorld, C/C++, MatLab, field experience of powerline structures, field experience of phasing overhead powerline conductors, field experience of phasing underground junction box structures, Microsoft Office Suite



Michael Trujillo

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services LLC, Albuquerque, NM 2017 — Present

Graduate Electrical Engineer

Assigned to T&D's electric system planning and analysis team. Responsibilities include assistance with system modeling, power flow and fault analyses, protective device coordination studies, arc flash studies, distributed generation system impact studies, ad hoc system analysis reports, construction work plans, long range plans, coordination studies and protection and control design/implementation for electrical cooperatives, investor owned utilities and municipalities.

Education:

BSSE, New Mexico Institute of Mining & Technology, Socorro, NM, (b)(6)

Academic Honors:

(b)(6)

(b)(6)

(b)(6)

Skills:

Programming: MATLAB, Verilog, Assembly, C

Equipment: Oscilloscopes, Microcontrollers, Function Generators, 3D Printing

Knowledgeable in Microsoft Word and Excel

Activities:

Kappa Sigma Fraternity, New Mexico Institute of Mining & Technology Chapter; President, 2015 – 2016; Treasurer, 2014 – 2015; Pledge Educator, 2013 – 2014



Willie Lopez

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services LLC, Albuquerque, NM

2020 - Present

Graduate Electrical Engineer

Assigned to T&D's electric system planning and analysis team. Responsibilities include assistance with system modeling, power flow and fault analyses, protective device coordination studies, arc flash studies, distributed generation system impact studies, ad hoc system analysis reports, construction work plans, long range plans, coordination studies and protection and control design/implementation for electrical cooperatives, investor-owned utilities and municipalities.

Synergi Electric Distributed Energy Resources Analyses: Analyses of approximately 40MW of photovoltaic Distribution Energy Resources to ensure safe and effective interconnections. The analysis includes evaluation of the base case with existing generation to ensure an effective model. The proposed generation is studied to determine if the site can be added, with or without upgrades. If violations exist, required upgrades are determined to ensure voltage, loading, voltage fluctuation, fault current, and islanding concerns are addressed.

Model Builds using Milsoft's WindMil: Model builds include importing line sections and equipment using ArcGIS. Verification of all conductors and specifications for equipment between WindMil and ArcGIS. Conduct necessary comparison with actual in-field equipment for model accuracy. Model completion for future power flow, fault analyses, and protective studies.

PV Pre-Application Report Studies and Synergi PV Supplemental Reviews: Developed and supported the development of several Pre-Application Reports and one PV Supplemental Review.

Coordination Study: Assisted on a portion of the City of Gallup, NM Electrical Utility's coordination study using Milsoft's LightTable.

Voltage Induction Calculations: Completed voltage induction calculations for a transmission line being built next to an energized transmission line.

Field Audits: Field verified condition and framing specifications of electric poles in preparation for joint use additions.

Internships:

New Mexico Tech, Socorro, NM

Summer – Fall 2018

Student Intern

Research with Dr. Jorgensen; building and testing antennas and the systems that run and process data received from those antennas.

Los Alamos National Laboratory, Los Alamos, NM

Summer 2016

Student Intern

Worked at the Applied Physics Group P21 in the micro fluidics, miniaturization and magnetism lab. Characterized and designed pumps to be implanted in micro fluidics.

Education:

BSSE, New Mexico Institute of Mining & Technology, Socorro, NM, (b)(6)

A.S., Santa Fe Community College, Santa Fe, NM, (b)(6)

Skills:

Synergi Electric, Milsoft's WindMil®, Milsoft's LightTable, ArcGIS, Google Earth, Inventor, Auto CAD, Excel, Power Point, Word, MATLAB, Python, C, Verilog, Arduino

Activities

Teaching Assistant for Electrical Engineering Department, New Mexico Institute of Mining & Technology, Socorro, NM

Math Tutor, Physics and Engineering, Santa Fe Community College, Santa Fe, NM

Supplemental Instructor, Santa Fe Community College, Santa Fe, NM



Eric Sandoval

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services LLC, Albuquerque, NM

2021 - Present

Graduate Electrical Engineer

Assigned to T&D's electric system planning and analysis team. Responsibilities include assistance with system modeling, power flow and fault analyses, protective device coordination studies, arc flash studies, distributed generation system impact studies, ad hoc system analysis reports, construction work plans, long range plans, coordination studies and protection and control design/implementation for electrical cooperatives, investor-owned utilities and municipalities.

Education:

BSSE, New Mexico Institute of Mining & Technology, Socorro, NM (b)(6)

A.S. Pre-Engineering, Luna Community College, Las Vegas, NM, (b)(6)

Eastern New Mexico University, Portales, NM, (b)(6)

Skills:

Synergi Electric, Milsoft's WindMil®, Milsoft's LightTable, ArcGIS, Google Earth, Inventor, Auto CAD, Microsoft Office, MATLAB, C, Atmel Studio, Verilog, microcontroller programming; 3D printing, Spanish fluency

Awards

Wolf's Den 2017 Finalist, New Mexico Institute of Mining & Technology, Socorro, NM

(b)(6)

Activities/Achievements

Men's Basketball Team, Eastern New Mexico University

Certified Nursing Assistant (CNA); CPR Certification

New Mexico Department of Transportation Health Certification; Class A Commercial Driver License



Andrew Rodriquez

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services LLC, Albuquerque, NM

2020 – Present

Graduate Mechanical Engineer

Mr. Rodriquez assists the Distribution Lines and Transmission Lines divisions with site selection review and the layout and design of new lines and the upgrade of existing lines for rural electric cooperatives and municipal electric utilities. Experience also includes field work and work order review.

Internships:

New Mexico AMP/ S.C.C.O.R.E. Program

January 2016 – December 2017

Student Intern

Worked under professor and graduate student on solar aircraft research project. Responsible for CAD drawings of aircraft. Gathered information to create three posters to present at several research conferences throughout New Mexico. Researched and collaborated with other students. Manufactured aircraft parts by hand and machine.

New Mexico AMP/ S.C.C.O.R.E. Program

Summer 2015

Student Intern

Researched mechanical and physical properties of polymer specimens as an adequate replacement of cement; gathered information for poster presentation; researched and collaborated with other students; and acquired new techniques in various engineering areas.

Education:

BSME, New Mexico State University, Carlsbad and Las Cruces, NM, (b)(6)

Berenice Olmos

(b)(6)

(b)(6)

Professional Experience

Transmission & Distribution Services LLC, Albuquerque, NM

2021 – Present

Graduate Mechanical Engineer

Ms. Olmos assists the Distribution Lines and Transmission Lines divisions with site selection review and the layout and design of new lines and the upgrade of existing lines for rural electric cooperatives and municipal electric utilities.

Teleperformance

May 2020 – August 2020

Bilingual Customer Service Representative

Handled more than 50 customer interactions daily resolving electric service and billing issues. Memorized company products and services to provide information to customers. Kept records of customer interactions and transactions.

Education

BS Aerospace and Mechanical Engineering Double Major, New Mexico State University, Las Cruces, NM, (b)(6)

Activities

Society of Hispanic Professional Engineers (SHPE) 2020-present

Extreme Engineering, SHPE National Convention 2020

24-hour challenge to develop a 3D model in SolidWorks of a futuristic city including virtual reality in its development and function; created a promotional video featuring city's benefits

Optical Alignment System

Working in coordination with SAS-SAT club to develop an algorithm tracking system to align two cube satellites by image processing; worked on a servo model in SolidWorks to turn a cube satellite with 6 degrees of freedom, developed an Arduino code for cube satellite servo

Becas Talento

Aided high school students through a scholarship enrichment program, tutored students participating in robotics, programming, and oral expression workshops, guided students in development of projects with innovative solutions to common problems



Jarred Thomas

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

December 2020 – March 2021

Civil Engineer

January 2022 - Present

Designs grading and drainage plans, utility expansion and upgrade plans, and storm water runoff management plans for a variety of engineering projects. Underground trench design, single, double and three-phase distribution lines and transmission line design

New Mexico Air National Guard

July 2020 – December 2020

Structural Shop Manager

Manage assigned personnel, submit acquisition forms, manage and maintain accountability for assigned equipment, assign duties, and schedule trainings.

New Mexico Institute of Mining and Technology, Civil Engineering **May 2019 – December 2019**

Research Assistant

Designed and fabricated materials to produce consistent results across several rounds of testing.

New Mexico Institute of Mining and Technology, Civil Engineering **January 2018 – May 2018**

Teaching Aid

January 2019 – May 2019

Graded homework and tutored students for Construction Management Class.

New Mexico Air National Guard

August 2017 – Present

Structural Apprentice

Performed all facets of construction for mission accomplishment.

Education:

BS Civil Engineering, New Mexico Institute of Mining and Technology, Socorro, NM, (b)(6)

Technical Skills:

PLS-CADD, AutoCAD, MS Office



Tim Perez

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

2019 - Present

GIS Specialist

Provides assistance to Lines and Planning divisions. Creates planning maps and distribution databases. Runs GIS mapping systems for clients and internal line design. FAA UAV licensed remote pilot for T&D's in-house Unmanned Aerial Systems (UAS) services.

Jemez Mountains Electric Cooperative, Hernandez, NM

May 2018 — November 2019

GIS Administrator

Administered GIS Databases for ArcGIS, Milsoft Windmil, and Partner Field Design. Created and updated construction orders in GIS for service lines, distribution lines, and transmission lines produced maps and data for ArcGIS Online to assist linemen, stakers, and other field members using ArcGIS Collector. Controlled and managed the electric circuit connectivity model. Assisted and educated stakers with Partner Field Design and GPS units. Forecasted outages by using Milsoft Windmil Software. Organized plan to digitize rights of way in GIS

New Mexico Gas Company, Albuquerque, NM

February 2018 — May 2018

GIS Technician

Created and updated construction orders and premise points in GIS for service lines and main lines. Generated a spatial database by geocoding points from an Excel spreadsheet in order to show checked compression fittings. Assisted in the transfer from GeoFields Pipeline Open Data Standard (PODS) to ESRI's Utility and Pipeline Data Model (UPDM). Optimized the use of ESRI's ArcMap for the engineering staff to produce a more efficient and effective real-world GIS experience. Supported staff throughout the state of New Mexico with GIS for digitization of old records.

Bureau of Land Management, Santa Fe, NM

June 2011 — December 2017

Office Automation Clerk/GIS Student

Provided advanced Geospatial analytical techniques to solve complex GIS issues by designing queries and models that extract data, display statistics in charts and tables, and summarize data. Designed, developed, implemented, and maintained spatial datasets that track projects, generate reports, manage workloads, and facilitate decision making. Assisted in supervising and mentoring new GIS employees and students and provided projects and training. Assisted in creating and implementing the Status Plat Conversion Project. Created automatic processes through the use of GIS modeling such as merging lease parcel data within a specific location to create a list of stipulations. Developed workflows to establish spatial datasets for multiple projects and resource specialists. Created, managed, and verified the accuracy of GIS data, attribute data, federal data standards, metadata, and GIS databases. Performed and developed presentations for specific projects, workflows, and trainings. Developed high quality maps for industry, management, and presentations. Performed GIS technical support and trainings for applications and hardware such as tablets, GPS units, and large-scale plotters.

Licensing:

UAV FAA Licensed Remote Pilot # 4470009

Education:

Bachelor of Science in Geography, University of New Mexico, Albuquerque, NM, (b)(6)

High School Diploma, Desert Academy, Santa Fe, NM, (b)(6)

Technical Skills:

GIS Software: ArcMap, ArcCatalog, ArcGlobe, ArcScene, ArcPad, ArcGIS Online, Survey 123, QGIS, AutoCAD, AutoCAD Civil & Civil 3D, Milsoft Windmil, Partner Field Design

GIS Hardware: Trimble GPS Units, Garmin GPS Units, Leica GPS Units, Apple iOS Tablets, Android Tablets, Rugged Tablets, Projectors, Digital Cameras, USB Drives, Wireless Devices, Scanners, Copy Machines, Misc. Printers and Plotters

Microsoft Office: Access, Excel, Word, Visio, PowerPoint, Outlook, Publisher

Other Software: Adobe Illustrator, Adobe Photoshop, Adobe Dream Weaver, Adobe Acrobat, PyScripter, SketchUp, Partner Web, WinSCP



John Padilla

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

2014 - Present

Project Manager

Responsible for work order reviews, line inspection, and relevant standards compliance. Inspects construction, ensures structures are built to relevant specifications, and inspects new line construction. Assists survey crews with line inventories of distribution systems, rebuilds, and structure identifications.

National Rural Electric Cooperative Association, Contractor

March 2010 – November 2013

Power line Consulting Inspector, Aba, Nigeria

Performed transmission line inspections of 33kV line including: 100 kilometers (km) of tubular steel and concrete structures, two circuit and quad circuit lines, 30 kilometers (km) 115kV new line construction, 29 individual 11kV line. Generated formal inspections reports weekly for use in project planning and implementation. Provided alphanumeric system to identify structure for location and reports according to transmission path from generation plant to substations and from substations to residential. Issues discovered and reported prevented loss of life, equipment damage, and future outages such as: right of way encroachments and line clearances, including residential antennas and water towers, vegetation clearances, damaged conductors, incorrect JB boxes for fiber optics, incorrect grounding of structures, splicing, and loose connections on terminations, discovered serious hazard of a fiber optic in danger of falling into the hot phases which could cause power outage, major damage to the line, and loss of the expensive communications optic cable.

Power Line Construction Supervisor, Maridi, South Sudan

Santo Domingo, Dominican Republic

Coordinated the construction of over 15km of 15kV and 7.2 kV new line construction to provide power to poverty stricken, rural areas in the Dominican Republic in 3-month period. Installed 25kV, 15kV, and 10kV transformers. Delivered 1.8 kV new secondary residential lines. Responsible for construction of over 3km of 7.2 kV new line construction and installation of 200kV transformer to provide power to the new water treatment plant supplied by China to improve the lives of the inhabitants of Maridi, South Sudan. Developed and trained local inhabitants with skillsets necessary to become lineman in their native countries, including: sectionalizing, disconnect switch install, tailgate documentation, switching and troubleshooting, hot stick, and procedure use and adherence.

Project Manager/Construction Supervisor, Maridi, South Sudan

Completed construction of compound, including living and visitors' quarters, office complex, warehouse. Excellent managerial and communication skills enabled acceleration of original schedule from two months behind to completion two weeks ahead of schedule. Teamwork, dedication and the timely completion of the compound and of all concrete work for the power house and substation, the entire project was completed six months ahead of schedule far exceeding NRECA's expectations. Supervised and organized 38 personnel in numerous disciplines including

masons, carpenters, and painters. Excelled in primitive conditions and with a lack of resources plus provided training for new, inexperienced employees; projects completed with 80% primitive tools and physical labor with established quality comparable to construction projects in the United States.

Tristate Generation and Transmission Association

April 1995 – April 2010

Journeyman Lineman

Transmission Line Foreman

Enhanced public relations skills while acting as a liaison with private landowners and tribal entities regarding maintenance and right of way issues. Eliminated need for headquarters' involvement thereby resulting in increased community outreach and tripled productivity. Directed personnel, materials, and equipment during transmission failure at Storrie Lake substation. Completely re-routed power into a mobile transformer and restored power within record 24 hours to Mora-San Miguel Cooperative in Las Vegas, NM. Oversaw the planning and implementation of Taos Canyon Right-Of-Way Project. Performed aerial inspection of 230kV intertie from Walsenburg, CO to Gladstone, NM preventing a transmission line outage and saving \$30,000. Trained over 20 linemen in transmission bare-handing and hot sticking while emphasizing safety. Developed ability to think clearly in emergency situations. Directed crews and bypassed all circuit breakers and restored power within five hours during Socorro fire that tripped the substation.

Technical Skills:

GIS Software: ArcGIS Online, Survey 123 and Collector



Nathan Duran

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

2022 – Present

Journeyman Lineman

Responsible for work order reviews, line inspection, and compliance for cooperatives and other utilities in the state of New Mexico and Southwest region. Inspects new line construction and ensures structures are built to client specifications. Assists survey crews with line inventories of distribution systems, rebuilds, and structure identifications.

Jemez Mountains Electric Cooperative, Jemez Mountains, NM

District Manager, Jemez Springs and Cuba Offices

2015-2020

Acting District Manager, Jemez Springs and Cuba Offices

2014-2015

Managed daily office business supporting both Cuba and Jemez Springs district offices. Prepared and managed district office budgets. Mediated consumer complaints assuring customer service and PRC ruling implementation. Mediated and/or settled employee disputes in line with the IBEW bargaining unit. Ensured the Cooperative's compliance within PRC ruling guidelines. Managed 35 employees supporting 7 internal departments. Coordinated and scheduled line construction projects. Worked directly with engineering staff in strategic planning of infrastructure maintenance and long-term planning of replacement infrastructure. Managed the Navajo Nation line extensions projects and easements supporting projects. Evaluated outages and strategized corrective action plans for restoration, minimizing consumer impact and ensuring safe working conditions for the crews. Managed the district fleet programs. Prepared and presented direct reports to the Board of directors. Attended monthly Board meeting supporting district accomplishments. Lead and coordinated wildfire response and mitigation work with the Forest Service.

Safety Coordinator

2012-2016

Provided full coordination of employee training and safety meetings in compliance with OSHA, PRC, NRECA, RUS, NESC, NEC standards. Managed and provided pole climber required certification procedures. Performed liability assessments and plan corrective action plans. Assured compliance with safe working practices and procedures. Managed employee accident reporting OSHA (DART) and workman's compensation reports. Inspected and issued Personal Protective Equipment to employees. Coordinated and lead fleet safety inspections. Coordinated Employee Safety Committee, and lead monthly meetings taking action on issues brought forth. Served as Head of Apprentice Testing Committee. Provided monthly reports to the Board of Directors. Facilitated annual safety inspections ensuring RESAP (Rural Electric Safety Accreditation program) compliance.

Journeyman Lineman

2003-2012

Apprentice Lineman

1999-2003

Responded to service calls to restore power and performed stand-by duties for power restoration and associated problems during and after normal working hours, and on holidays and weekends. Complied with the Cooperative's safety rules, used safe work practices and possessed a thorough working knowledge of first aid and pole top rescue. Maintained a working knowledge of all substation switching operations, system apparatus and devices. Possessed a knowledge of

Cooperative and RUS specifications, the National Electric Safety Code, OSHA and Cooperative mapping systems, staking sheets, and line department policies and procedures. Participated in safety meetings and other special training sessions. Recommended improvements in operations, practices, procedures and methods. Provided supervision to and assisted Apprentice Linemen and Groundmen.

Warehouseman

1997-1999

Ordered and inventoried materials for 2 district offices. Performed annual material audits and worked with auditors. Issued material daily to crews in line with work assignments. Performed grounds and building maintenance as needed

Certifications and Licenses:

Journeyman Line Certification

NRECA Certified Loss Control Prevention

OSHA 100

OSHA 30 Hour

Defensive Driving

Technical Skills:

GIS Software: ArcGIS Online, Survey 123 and Collector



Mario Marquez

(b)(6)

(b)(6)

Professional Experience:

Transmission & Distribution Services, LLC, Albuquerque, NM

2022 – Present

Journeyman Lineman

Responsible for Work Order Reviews, Line Inspection, and RUS compliance for cooperatives in the state of New Mexico and Southwest region. Inspects new line construction and ensures structures are built to RUS Specifications. Assists survey crews with line inventories of distribution systems, rebuilds, and structure identifications.

Self-Employed, Farmington, NM

2012 – 2022

Journeyman Lineman

Worked as contract labor for Crestview Construction, HT LLC, Aspen Cabinets and private individuals

Superior DMB, Farmington, NM

2015 –2018

Owner/Operator

Owned and operated a mobile sandblasting business; solicited bids and performed on-site projects.

City of Farmington, Farmington, NM

2014 –2015

Independent Inspector

Inspected the constructed built by contracted line crews for the City of Farmington. Approved and verified work orders and quality of work performed.

McKinley Sales, Albuquerque, NM

2013 –2014

Contractor/Supervisor

Contracted with McKinley Sales to build two electrical substations for the City of Farmington.

City of Farmington Electric Utility Department, Farmington, NM

Maintenance Supervisor

2007-2012

Supervised the maintenance and service of the Electric Utility Department including night crews and transformer shop crews. Managed the maintenance of substations and contracted tree cutting crews. Oversaw the purchase of equipment and tools and advised on new product implementation. Presented equipment budgets and forecasts for the Electric Utility Department.

Working Foreman

2005-2007

Scheduled the maintenance and repair of substations, transformers, battery banks and tool distribution on both a daily production basis and for long term projects.

Journeyman Lineman

1996-2005

Construction of transmission and distribution power lines throughout San Juan County including maintenance of power line and emergency repair work.

Certifications and Licenses:

Licensed Journeyman Lineman

Class A CDL

Certificate - Drug and Alcohol-Free Workplace Program for Supervisors

Certificate - supervisor Re-Orientation Training

Certificate - Reasonable Suspicion

Certificate - Supervising Difficult Employees

Certificate - Stationary Battery Seminar

Technical Skills:

GIS Software: ArcGIS Online, Survey 123 and Collector

Education:

National Joint Apprenticeship and Training, Completion of 4-year program, Farmington, MA, (b)(6)

(b)(6)

Skills:

Bilingual Spanish speaker; electrical wiring, welding, mechanical ability



Colby Manuelito

Professional Experience

Transmission & Distribution Services, LLC, Albuquerque, NM

UAV Pilot and Survey Technician

2019 – Present

FAA UAV licensed remote pilot for T&D's in-house Unmanned Aerial Systems (UAS) services. As a Survey Technician, responsible for operating surveying instruments, such as Trimble GPS TSC3/R8, which measures, records GPS points, collects data, and provides the information required to properly layout and design various projects such as distribution lines and substations. Locates utilities, roads, highways related to power line crossings.

Performs legal surveys of projects and secures field ties. Searches for section corners, property lines, and survey points. Collects and analyzes source maps, survey data, photographs, computer records and other information. Organizes field notes and drawings used to generate a plan and profile.

Experienced with recording joint use pole attachments and conducting system inventories including GPS location, equipment identification, pole identification tags, and visual inspection of poles for electric cooperatives and municipal utilities.

Licensing:

UAV FAA Licensed Remote Pilot # 4546234



Kevin Quintana

Professional Experience

Transmission and Distribution Services, LLC, Albuquerque, NM

May 2007 - Present

Survey Chief

Mr. Quintana is Survey Chief with several years of field experience. In this capacity, he has been responsible for preliminary line layout including: preparation of work support for the field, location of acceptable siting and layout of preliminary routes for overhead power lines, underground power lines, natural gas lines, and downloading of files for surveyor processing. In addition, Mr. Quintana has led legal surveys of projects to secure field ties, locate utilities, roads, and highways the powerline crosses. He also completes pole staking, prepares staking sheets, and collects field observations used to generate a plan and profile.

Other surveying responsibilities include preparation of field books, completion of staking sheets for clients, and addressing archeological concerns. He also represents the firm at project planning meetings, pre-bid meetings and pre-construction meetings. He is charged with managing crew members, maintaining crew timesheets, expense reports, verifying project maps and project invoicing. Mr. Quintana works with a Trimble 5800/TSC2 GPS unit and the NIKON DTM 430 total station.

Experienced with recording joint use pole attachments and conducting system inventories including GPS location, equipment identification, pole identification tags, and visual inspection of poles for electric cooperatives and municipal utilities.

Experienced performing wooden pole inspection and testing with an IML TDS-750 Resistograph.

SGS Witter, Inc., Albuquerque, NM

Surveyor Helper

June 2004-2006

Party Chief

2006-May 2007

Helped with the layout of overhead powerline, underground powerlines, and natural gas lines. Filled in as a crew chief; completed legal surveys, and secured field ties. Performed pole staking, staking sheet preparation and collection of data for profiles. Experienced with a Trimble 4800/TSE1 GPS unit and NIKON total station.

Perce Engineering and Associates, St. Michaels, AZ

Surveyor Helper

1996-2000

Assisted with layout of preliminary lines for overhead powerline and gas lines. Helped with legal survey; secure field ties; pole staking; and profiling powerlines. Worked with a NIKON 3810B unit.

Academic Background

Completed college courses during senior year and in (b)(6) at Colorado University, Denver CO

(b)(6)

Training

Trimble GPS Surveying, Real-Time Kinematic Surveying, Albuquerque, NM
Rural Electric Cooperative Association, (b)(6) Staking School
Vector's GPS School, Surveying with GPS Equipment

Tribal Affiliation

(b)(6)



Bryant Yazzie

Professional Experience

Transmission and Distribution Services, LLC, Albuquerque, NM

Survey Chief

August 2009 - Present

Survey Technician

May 2007 – August 2009

Prepares field work and downloads collected data files. Assists in locating acceptable routes and layout of preliminary routes for overhead powerline, underground powerline, and natural gas lines. Locates utilities, roads, and highways for powerline crossings. Performs legal survey and secures field ties. Performs pole staking and collects field observations used to generate a profile.

Line layout, legal surveys, and pole staking have been completed for Sierra Electric Cooperative, Continental Divide Electric Cooperative, Jemez Mountains Electric Cooperative, and the Navajo Tribal Utility Authority plus other clients.

Experienced with recording joint use pole attachments and conducting system inventories including GPS location, equipment identification, pole identification tags, and visual inspection of poles for electric cooperatives and municipal utilities.

Experienced performing wooden pole inspection and testing with an IML TDS-750 Resistograph.

SGS Witter, Inc., Albuquerque, NM

March 2005 – May 2007

Surveyor Helper

Assisted with layout of overhead powerline, underground powerlines, and natural gas lines. Performed pole staking, staking sheet preparation and collection of data for profiles.

Training

Trimble GPS Surveying, Real-Time Kinematic Surveying, Albuquerque, NM

Tribal Affiliation

(b)(6)



Jerome Perez

Professional Experience

Transmission & Distribution Services, LLC, Albuquerque, NM

Survey Party Chief

2017 – Present

Survey Technician

2013 – 2017

Responsible for operating surveying instruments, such as Trimble GPS TSC3/R8, which measures, records GPS points, collects data, and provides the information required to properly layout and design various projects such as distribution lines and substations. Locates utilities, roads, highways related to power line crossings. Performs legal surveys of projects and secures field ties. Searches for section corners, property lines, and survey points. Collects and analyzes source maps, survey data, photographs, computer records and other information. Organizes field notes and drawings used to generate a plan and profile. Designs profiles using Autocad Civil 3D 2015.

Experienced with recording joint use pole attachments and conducting system inventories including GPS location, equipment identification, pole identification tags, and visual inspection of poles for electric cooperatives and municipal utilities.

Experienced performing wooden pole inspection and testing with an IML TDS-750 Resistograph.

A-Star Motors— Albuquerque, NM

July 2012 — August 2013

Sales and Operations Manager

Oversaw all operations including vehicle purchasing, customer relations, vehicle sales and closing, marketing strategies, as well as business appearance, and general store procedures.

Pep Boys— Albuquerque, NM

January 2011 — June 2012

Commercial Sales Manager

Responsible for developing relationships with commercial accounts and ensuring satisfaction. Dramatically increased sales by working closely with dealers and developing strategies to provide ideal customer service and proper inventory for assigned area.

Best Automotive— Albuquerque, NM

December 2008 — December 2010

Parts and Store Manager

Oversaw a team of auto technicians to provide ideal service to customers. Managed all shop operations including marketing, inventory, budgeting, sales, parts management, as well as upkeep of shop appearance.

Pep Boys — Albuquerque, NM

October 2005 — March 2006

Commercial Sales Manager

US Army (Active Duty)**September 2002— September 2005***Corporal E4*

Served active duty for three years while serving our country in Iraq for over a year as part of the security team. Constantly challenged both physically and mentally in which dedication, determination, and confidence was required at all times. Positions included: Recreational Facility Manager (Fort Hood, Texas), and Brigade Colonel Driver (Fort Hood, Texas) which required continuous dedication and perfection. Continuously multitasked to carry out specific orders, including the handling of high clearance paperwork and information.

Training

NMRECA Staking School, Albuquerque, NM, (b)(6)

Improved skills and knowledge of overhead structure design and sizing transformers and conductors.