

## **Andrès Reyes**

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Las Vegas, NV 89129

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### **Work Experience**

**Nevada Power, Las Vegas, NV**

**1990 – 5/1997 and 11/1997 - Present**

**Senior Engineer, Substation Engineering, 2005 – Present**

- Perform substation engineering design, implement and upgrade four substation from the old RTU and electromechanical relay in to a new advance automate substation in what several automation logics can be implemented like sympathetic trip avoidance, hot load pickup logic, and transformer failure mitigation.
- Send SCADA telemetry like analogs, indications, and allow controls in the substation.
- Design a bus split scheme for Winterwood 69 kV transmission substation, a PDS substation, work with the installation of a new control house with around 60 new relays panels for Clark 69/138 kV transmission substation, and change eighteen 69 kV breakers.
- Advise, be a mentor, and give training for the substation engineering department including Senior Engineers, Staff Engineers in the area of automation, relay, and protection substation engineering design.

**Senior Engineer, System Protection, 11/1997 - 2005**

- Perform system protection design engineering for automation and relay recommendations scheme for generation plant, transmission, distribution substations in a range of 500KV to 4.16KV system, specify new relays, perform coordination, studies, and calculate relay settings for new transmission and distribution systems plus additions.
- Managed the design of transmission and distributions system upgrades.
- Give training for all personnel in the System Protection Department including Senior Engineers, Staff Engineers, and Relay Electrician.
- Be a mentor to substation engineers in system protection and automation philosophies.
- Provide SCADA with Analog, Indications, and Control. Create database to convert different protocols between substation devices and SCADA protocol.
- Implement automation logics like transformer restoration in substation, sympathetic trip logic avoidance, hot load pickup, and others logics and automation as needed.
- Provide planning, and scheduling maintenance for relays, UPS batteries and automation devices.
- Create standard settings for distributions, transmission relays settings, and for automation providing a sound saving for the company.
- Create and implement the first electronic relay database for NPC and maintenance of the current database.
- Completed knowledge in several protocols like ModBus, ModBus +, Conitel 2020, Conitel 300, L&G 8979, DNP-3, Redec 70H, Tejas 3, SEL, Harris 5000/6000, OPC Server, IEC 60870-5-101, IEC 60870-5-104, and much more.
- Communication recommendation between devices like RS232, RS485, and fiber, fiber optics transceivers.

**Nevada Power (Continued)**

**Engineer, System Protection, 1990 – 5/1997**

- Perform system protection design engineering for automation and relay recommendations scheme for generation plant, transmission, distribution substations in a range of 500KV to 4.16KV system, specify new relays, perform coordination, studies, and calculate relay settings for new transmission and distribution systems plus additions.
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**OMICRON ELECTRONICS, HOUSTON, TX**

**5/1997 – 11/1997**

**Application and Sales Engineer**

- Manage the Omicron sale department for Latin American and Canada. There I managed Nineteen (19) Omicron Sale Representatives in different countries and recruiting several more.
- Give training to Latin American Utilities engineers like end-to-end relay testing, microprocessors, electromechanical relay testing philosophies recommendations, and training for relay maintenance testing. Give presentation to over 200 utilities protection and substation engineers.
- Increase the sale significantly in a short period of time.
- Help to solve problems encountering on different systems.
- Travel over 100,000 kilometer to different countries, which gave me different perspective in construction and design of different companies of different countries.

**Prior to 1990**

Plant Engineer, Planning and scheduling, Joseph Kennyson, Ltd., 1986 - 1990  
Technical Director of a Small Company, 1982 - 1986

**Education**

Electromechanical Engineer, The Autonomous University of Santo Domingo, Dominican Republic  
Six year program accredited in the United States as the academic equivalent to the following:

- Bachelor's Degree in Electrical Engineering;
- Bachelor's Degree in Mechanical Engineering;
- Master's Degree in Electrical Engineering

**Publications**

- 1998 Low-Profile Design Pleases the Eye, Transmission & Distribution World (April 1998)
- 1997 Sympathetic Tripping Problem Analysis and Solutions, Western Protective Relay Conference
- 1997 Last Generation in Protection, Meters and Transducers Testing Equipments, Biel 97
- 1995 IEEE Relay Logic Proof with Real Live DFR Recording in a PC platform

**Professional Affiliation**

Associate member of The Institute of Electrical and Electronics Engineers, Inc (IEEE)

**Language**

Fluent in both English and Spanish, knowledge of Portuguese and Italian

**Skills**

- Languages: C, C++, Matlab, Fortran 90, Java, and Assembly for Digital Signal Processors. Aspen software's and Power Base.
- Operating Systems: Windows, MS-DOS, Concurrent Dos, Unix, Linux and others