

Company/lab name: Iberdrola

Name of the Project: Update the SCADA System and implementation of a shadow redundant Center

Area: Generation

Company/lab website:
www.iberdrola.com/ www.neoenergia.com

Duration / Location: 12 weeks / 6 months
Brazil

Company/Lab Description:

Iberdrola is a multinational group leading the energy sector: the company produces and supplies electricity to some 100 million people in the countries in which it operates. Furthermore, **the company has become the leader in clean energy** —Iberdrola is the first renewable producer amongst European utilities and the cleanest power company in the USA, with almost zero emissions—, **it is pioneering the rollout of smart grids and has an energy storage capacity in excess of 4 GW.** In anticipation of the energy transition, Iberdrola has committed to sustainable solutions that require greater **electrification of the global economy:** more clean energy, more storage capacity, more backup power, more and smarter grids, and **more digitization.** **Neoenergia**, part of Iberdrola Group, **is a Brazilian electricity company leader in Latin America.** Neoenergia core business in Brazil includes power generation, high voltage grid operation, power utilities and trading. Neoenergia is the **biggest private power company in terms of number of clients.** Operation Center in Rio de Janeiro operates 680 Km of high voltage power lines, 11 substations (230 kV and 500 kV) and 820 MW of hydro power plants. In 2018, the Center will add 1.820 MW of hydro power generation and prepare the integration of a new hydro plant of 350 MW, and study the integration of new transmission assets.

Project Description and Goals:

- Develop technical studies together with the operation and engineering teams to identify the best technological solution to update the SCADA System (Supervisory Control and Data Acquisition System) of Neoenergia Operation Center located in Rio de Janeiro/Brazil;
- Search the best alternatives to a shadow operation center;
- Benchmark the best practices adopted by Operation Centers of other companies;
- Develop and review technical specifications for new equipment and systems;
- Participate on the integration of new generation and transmission line projects into the Operation Center;
- Learn about the best practices of Operation Centers, such as pre operation and planning, real time operation, post operation and key performance indicators

Intern Role Description:

Member of Neoenergia Operation Department, contributing for the development of improvement and technological projects.

Profile: Skills & Experience Pre-required:

Engineering / Mathematics / IT, willing to learn, interested in innovating, fluent in English.