FINLEY ENGINEERING

INNOVATION TO THE NEXT POWER

TITLE: Resident Engineer I **Date:** 4/7/2010
Classification: Exempt - Technical
Department: Energy/Telcom
Reports to:

Position Summary:
Performs entry-level professional engineering work related to power distribution including developmental assignments involving the application of standard techniques, procedures, and criteria in carrying out routine engineering tasks under close supervision. Applies prescribed methods to complete limited and specific portions of the broader assignment of an experienced engineer, adjusts and correlates data, recognizes discrepancies in results and follows operations through a series of related detailed steps or processes. May exercise limited judgment in making preliminary method selections and the adoption of alternatives.

Essential Duties and Responsibilities:

Operates and maintains technical surveying instruments to accomplish related work assignments.

Provides calculations and records in support of all survey activities.

Create staking sheets (this is a type of formatted field data sheet) identifying control points and summarizing location of inventory.

Draft and summarize field notes in an organized and acceptable manner.

Develop construction plan from point A to point B, creating footprint for design.

Surveying assignments are performed for any size project, at any location, as required.

Provide competent engineering and technical assistance to the Senior Project Designer.

Provide competent engineering and technical assistance to the Project Manager.

Develop computer skills required for transmission and distribution power design. This will include the development of skills with programs such as AutoCAD, PLS CADD, FECMAP, and Alcoa SAG10.

Complete weekly time sheets, in conjunction with weekly expense and mileage reports.

Analyze survey reports, maps, drawings, blueprints to plan projects.

Compute load and grade requirements, and material stress factors to determine design specifications.

Inspect project sites to monitor progress and ensure conformance to design specifications and safety standards.

Direct construction, operations, and maintenance activities at project site.

Direct or participate in surveying to lay out installations and establish reference points, grades, and elevations to guide construction.

Estimate quantities and cost of materials, equipment, or labor to determine project feasibility.

Prepare or present reports on topics such as bid proposals, deeds, environmental impact statements, or property and right-of-way descriptions.

Provide technical advice regarding design, construction, or program modifications and structural repairs to managerial personnel.

Will be required to perform other duties as requested, directed or assigned.

Education and Experience:

Four-year engineering degree or equivalent combination of technical training and related experience. Ability and desire to acquire EIT designation.

Job Knowledge:

Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Design — Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

Mathematics — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

Building and Construction — Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.

English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar. Must speak English language fluently.

Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Administration and Management — Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

Computers and Electronics — Knowledge computer hardware and software, including applications and programming.

Skills:

Mathematics — Using mathematics to solve problems.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Science — Using scientific rules and methods to solve problems.

Active Listening — Giving full attention to detail of what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Reading Comprehension — Understanding written sentences and paragraphs in work related documents.

Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.

Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.

Negotiation — Bringing others together and trying to reconcile differences.

Abilities:

Deductive Reasoning — The ability to apply general rules to specific problems to produce answers that make sense.

Oral Expression — The ability to communicate information and ideas in speaking so others will understand.

Problem Sensitivity — The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Near Vision — The ability to see details at close range (within a few feet of the observer).

Oral Comprehension — The ability to listen to and understand information and ideas presented through spoken words and sentences.

Written Comprehension — The ability to read and understand information and ideas presented in writing.

Information Ordering — The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).

Speech Clarity — The ability to speak clearly so others can understand you.

Inductive Reasoning — The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).

Supervisory Responsibilities:

May provide informal supervision to Designer/Staker positions

Licenses, Certifications, Training Requirements:

Current motor vehicle drivers license in good standing

Physical, Mental and Visual Demands:

Flow of work involves normal mental and visual attention along with manual coordination much of the time. While performing the duties of this job, the employee is occasionally required to stand; walk; sit; use hands to finger, handle, or feel objects, tools or controls; reach with hands and arms; climb stairs; balance; stoop, kneel, crouch or crawl; talk or hear; taste or smell. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by the job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.

Work Environment:

Exposed to extreme weather conditions, including: hot and cold temperatures, rain, snow, dust, and wind. Some assignments are performed at a job site and may include some physical labor and environmental distractions such as changes in climate and topography. Physical hazards may be present. Will typically work in an office type environment.

Travel approximately 30% of the time.