CORDOVA ELECTRIC COOPERATIVE, INC. POSITION GUIDE

POSITION TITLE: PROJECT ENGINEER

DEPARTMENT: ENGINEERING AND OPERATIONS

I. OBJECTIVE

This is a position under the supervision of the IT and Project Manager (IPM) or Chief Executive Officer (CEO) in IPM's absence. The incumbent is to guide or assist in the engineering and project management activities of the Cooperative by applying technical knowledge, sound engineering judgment, and skill, to ensure that the electrical system and assigned projects meet present and future requirements and are rendering safe, effective, and dependable service in accordance with established objectives, policies, and plans.

In addition to the knowledge and understanding of engineering and project management principles, the position requires an individual who regularly exercises a high degree of emotional and professional ability to manage multiple demands in a stressful environment. The position requires an individual who can speak publicly and occasionally travel to remote locations in difficult and extreme weather and terrain.

II. ESSENTIAL FUNCTIONS

- 1. Provides project, engineering and field data to the Staking/Warehouseman to aid in the maintenance of information system databases and maps.
- 2. Identifies and Recommends grid design, organizational and operational improvements and the necessary Policy, Tariff, and Technical modifications necessary to implement them.
- 3. Consults grid modernization policies, architectures, and strategies to develop a smart grid platform for CEC including generation, transmission, distribution, and utilization.
- 4. Prepares cost estimates for internal CEC projects and programs and for customer requested work.
- 5. Receives applications for new electric projects including large or technically complex services and discusses the location and needs for electric and other services with the applicants. Meets with members on preparation of work orders.
- 6. Works with Warehouseman/Staking Technician to stake extensions or additions to the electric grid, including upgrading service to an existing member or an extension to a new member.
- 7. Prepares or supervises the preparation of staking sheets on extensions, relocations, retirements, and upgrading of electrical generation, transmission, or distribution facilities.
- 8. Ensures the proper performance and accuracy of meters to member-owned meter loops and the cooperative's outside distribution system and periodically audits them for compliance with safety and construction codes.
- 9. Assesses damaged, or requested relocation of distribution lines for repairs, upgrades, or reconfiguration.

- 10. Acquires right-of-way easements and regulatory permits as needed for assigned projects.
- 11. Inspects completed projects for compliance with performance contracts, CEC specifications, safety requirements, and other CEC criteria as outlined in project scopes to be approved by supervisor.
- 12. Provides project and engineering support to cooperative's management and construction personnel during the various phases of projects. Provides engineering and project management support to other departments when requested.
- 13. Participates in CEC safety meetings.
- 14. Evaluates CEC's electrical system on a continual basis to assure that the requirements for new, increased, or future loads and grid functionality are met. Determine when major system improvements should be made to ensure adequate, dependable, and efficiently delivered energy and interoperability with customer or partner equipment and facilities.
- 15. Inspects CEC system infrastructure and components by remaining alert at all times to observe any unsafe or unsatisfactory conditions, and reports or takes steps to rectify the condition.
- 16. Completes special assignments as mutually agreed upon with supervisor.

III. DUTIES AND RESPONSIBILITIES

- 1. Assist in design, development, and modification of CEC electric generation, transmission, and distribution system architecture and operations.
- 2. Participate in the preparation of the Power Requirements Study, Three Year Construction Work Plan, Long Range Plans, Capital Budget, and other studies as assigned. Make recommendations for the planning and development of system improvements and annual work programs.
- 3. Assist and advise Managers on grid planning, architecture, and grid performance related projects and improvements.
- 4. Perform routine engineering functions including transformer sizing and loss evaluations, wire capacity assessments, and grid integration of large power and industrial customers. Prepare equipment and material bid specifications for assigned projects. Work with the Staking Technician/Warehouseman to maintain system mapping and engineering data and in the purchasing of equipment.
- 5. Develop and implement an advanced metering infrastructure platform to assure accurate revenue metering and functional smart grid interoperability.
- 6. Recommend, procure, and administer projects including, but not limited to, grid architecture improvements; smart power, water, and heat production and use.

IV. RELATIONS AND CONTACTS

- A. Reports to: IT & Project Manager (CEO if absent)
- B. <u>Contacts</u>: Contacts are made both within and outside the Cooperative, firms, organizations, and other groups as deemed necessary to carry out the responsibilities of the position.
- C. This position requires the incumbent to have a positive working relationship with all employees and the general public.
- D. Keeps the IT and Project Manager (CEO) informed on projects.
- E. Works daily on establishing and promoting positive relationships with co-workers, cooperative members, associated organizations, and the public, while remaining in compliance with Board and Operating Policies of the Cooperative.

V. PHYSICAL AND EMOTIONAL DEMANDS:

The Cooperative is located in Cordova, Alaska. Cordova is an isolated, remote town, inaccessible by road, and subject to extreme climatic conditions. Air travel by fixed-wing aircraft is the primary means of transportation to and from Cordova, and frequently such transportation is unavailable due to weather. Cordova is also part of the Alaska Marine Highway System with ferry service to and from Alaska's mainland. Cordova itself contains terrain which may be difficult for some persons to navigate, especially in winter. Due to the remote location and extreme weather, candidates must be prepared for living and working conditions in this location. Significant physical and emotional stamina is necessary.

This employee is required to work in close cooperation with the IT and Project Manager and the CEO, department heads, fellow employees and the general public. The position is subject to high stress and demands and requires the ability to react to tense circumstances quickly and discreetly, while maintaining a calm manner.

Accurately and quickly proofread documents prepared by Cooperative supervisory, managerial, and professional personnel to make quick and accurate modifications where needed, and to produce staking sheets, reports, word processing materials, spreadsheets, and other materials common to an electrical cooperative at a professional level.

Sit, walk, stand, kneel, lift (up to 70 pounds of boxes of records and files), hear, talk, write, (understand and use the English language), climb stairs, and use both hands fully.

Must have the ability to read detailed information from printouts, computer screens, or other printed or written materials in English. Must have the ability to write detailed information in English. Working knowledge of personal computer applications including database, spreadsheet, word processing, and computer-aided drafting is required.

Be able and willing to work irregular hours or long continuous periods of times to meet the needs of the Cooperative when they arise including callout duties for outage response.

VI. MINIMUM QUALIFICATIONS AND SPECIAL REQUIREMENTS

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Qualified candidates are required to have a Bachelor's Degree in an Engineering or Technical field, Electrical Engineering is preferred. Five years of work-related experience utilizing project management and practical application of skills with a distribution/transmission utility or related organization is preferred. Knowledge and application of basic engineering and project management principles, including specification and coordination equipment and vendors, is preferred. Previous experience in the area of power generation, transmission, distribution, and utilization are preferred.

The candidate must have a working understanding of project management and engineering principles, concepts, and practices; and should become familiar with system geography and appropriate codes, statutes, and utility tariffs.

Incumbent must be able to do the following:

- Learn and apply applicable RUS and CEC Policies, Procedures, and Regulations.
- Possess a high level of confidentiality.
- Work independently and with minimum supervision.
- Organize work and meet deadlines.
- Develop a knowledge of current federal, state and local laws as they relate to this position.
- Obtain a valid Alaska driver's license within 30 days of employment and obtain CPR and First Aid cards with CEC provided training.
- Effectively communicate information verbally and in writing.
- Establish and maintain a positive effective working relationship with all employees, the general public, and project vendors and consultants in an efficient and effective manner.
- Contribute to a respectful, collaborative, smoke-free office environment.

All CEC exempt employees are expected to work when required during power restoration activities and to accomplish other projects.

NOTE: Complete achievement of certain of the above specifications may not be required if, in the opinion of the supervisor, a particular candidate possesses significant offsetting characteristics, such as past accomplishments, experience, education, or estimate of future potential. Should an applicant be deficient in certain educational achievements, offsetting experience may be substituted or vice versa.

CEC reserves the right to revise or change job duties and responsibilities. This position guide does not constitute a written or implied contract of employment.

I have read and understand this Position Guide.		
Project Engineer	Date	
Chief Executive Officer	Date	