## Job Description, Electrical Engineer, BS or MS, 5 to 15 years experience.

The candidate will be expected to support engineering activities associated with the development and certification of batteries, battery management systems and power systems being considered for use by the Navy and Marine Corps. The candidate will be expected to perform individually and as part of teams in a hands-on, laboratory environment.

## Primary Roles and Tasks:

- Support development of advanced, innovative power distribution systems, including hybrid and wireless power transfer systems, for use in land, sea and under-sea applications
- Provide technical oversight of power system hardware contractors by reviewing documentation such as electrical and mechanical schematics, test plans and data packages.
- Support system level testing events performed in both laboratory and relevant environments
- Proposal development and source selection
- Provide electrical engineering support in association with S9310 and SG270 certification testing, destructive and non-destructive
- Development of new test methods and protocols for high voltage DC applications
- Support the development of a Navy standard for Lithium-ion battery management systems (BMS). This includes but is not limited to the derivation of performance, safety and manufacturing requirements, developmental process flow, design verification and validation as well as production and quality assurance provisions.

## Primary Experience:

- Design, test and validation of analog, analog power and mixed signal electronics
- Power distribution and grounding of DC and AC systems and electronics
- Design, manufacture and test of printed circuits and electronics assemblies
- In depth knowledge of lithium-ion batteries and battery management systems
- Requirements derivation, traceability and verification
- Thorough understanding of standard test equipment (AC/DC power supplies, loaders, DAQs) and methods of instrumentation
- Hands-on troubleshooting of electrical systems
- Familiarity with underwater/submersible systems

## Additional Attributes & Experience:

- Interface buses (CAM, Mod, PCAN, RS232, etc.) and software controls
- Digital electronics
- Controls Software
- Renewable and hybrid energy systems and energy storage
- Pspice (or equivalent), Matlab, Labview
- NFPA 70E

Candidates must have a Bachelor's or Master's degree from an accredited university and have a minimum of 5-15 years of experience in the engineering field. Good oral and written communication skills are essential to this position, as is experience with MS Office applications (Word, Excel, Powerpoint, Project and Visio). The job seeker must be a U.S. citizen and eligible for a government security clearance. Successful application for a Department of Defense security clearance is required before an offer of employment can be made.

To apply, email <a href="mailto:nSWCCD\_Outreach.fct@navy.mil">nSWCCD\_Outreach.fct@navy.mil</a> a copy of your resume and make the subject line of the email the position for which you are applying.