

Philip Curtis
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Systems Engineer/Master Electrician
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Summary

- Master-of-Record Electrician, lead project-managing construction field engineer, & inspector liaison officer for solar system installations in MN & WI ranging from 3KW to1MW.
- A systems engineer & electrician experienced in practical operations, maintenance, troubleshooting, and repair.
- Commissioning Chief Engineer bringing new construction & shipyard-repaired vessels online & to safe ocean-going status.
- Develop & maintain all engineering systems, operational procedures, & safety plans across multiple luxury yacht programs.
- Long reputation of safety-focused engineering and management successes including employee retention & budget adherence.
- Proven and documented aptitude of electronic control systems, electrical, hardware, software, and mechanical.
- Project management successes due to adaptability, resourcefulness, tenacity, & deep learning abilities.
- Professional reputation for critical thinking, decision-making wisdom, and problem-solving ability.

Licenses

- Minnesota Master A Electrician (#AM761458)
- Wisconsin Master Electrician (#1531427)
- Minnesota First Class A Engineer (#1A738747)
- U.S. Environmental Protection Agency (EPA) Universal Engineer, HVAC
- USA Coast Guard Chief Engineer, Oceans, Unlimited Horsepower, 3000 Gross Tons

Skills

- Solar Project Manager, Field Designer, Electrician, Installer, Operator, Fault-Finder, & Maintainer
- Electrical & Electronic Control Systems Engineer
- Diesel Engine & Generator Technician (Certified by Caterpillar & MTU-Rolls-Royce)
- HVAC & Refrigeration Technician
- Boiler, Motor, Pump, & Gas Turbine Technician
- Hydraulic & Fluid Management Engineer
- Potable, Gray, & Black Water Systems Engineer
- NEC 2020 Code & Regulatory Compliance Officer
- Schematics, PLC & Ladder Diagrams, SCADA Systems, Blueprints, Software Dev. & Code Implementation
- Inspections, System-based Troubleshooting, & Repair Facilitator
- Professional Communication Skills, Detailed Organization & Record Keeping
- Safety Focused Engineering with Consistent Prioritization of Customer Service
- Reliability, Transparency, & Honesty are Core values

Experience

Master Electrician/Master-of-Record, TruNorth Solar Mar 2020 - Present

- Responsibility & project oversight of all company projects & electrical permits.
- Follow, approve, design, & field modify commercial & residential solar & electrical projects.
- Company chief enforcement officer of the National Electric Code (NEC2020).
- Customer service & communication with homeowners, businesses, government & licensing entities.
- Electrical Department manager overseeing field teams installing residential and commercial solar systems.
- Changed company's inspection procedure by establishing MN-DLI relationships leading to fewer inspection failures.

Data Center Supply Analyst, United Health Group-Optum Apr 2018 – Feb 2020

- Trusted solo engineer & only state-licensed electrician for UHG's primary data center facility.
- Perform Lube oil, water, & machinery logging and emergency operation procedures for server and equipment spaces.
- Designed & implemented a water ingress pumping solution preventing data center flooding emergencies.

Chief Engineer, Luxury Yacht Industry Nov 2006 – Jun 2016

- Lead decision-maker for electrical power management, distribution, maintenance, & repair.
- Chief Engineer facilitating operational & preventative maintenance tasks for all engineering systems, & held primary safety responsibility of all guests, crew, & the vessel.
- Lead project engineer for U.S. Coast Guard drydocking periods in worldwide shipyard locations.
- Managed all vendors, periodic engine overhauls, and legal-entity inspections of fire, emergency, generation, & propulsion systems.
- Sole responsibility of engineering consumable needs projection. Added value by spearheading a digital consumable usage data project leading to a 66% annual savings.
- Career highlight of passing all U.S. Coast Guard, UK-MCA, & international port authority inspections.

Chief Electrician and US Coast Guard Engineering Officer

U.S. Merchant Marines May 1998 – Mar 2006

- Three Medals of *Outstanding Achievement* for engineering service in Persian Gulf.
- Designer & builder of shipboard electrical department for newly constructed USNS-LMSR vessels.
- Chief electrician & fire-fighting emergency team leader for Iraqi Freedom military support vessels.

Education

These are some of my educational highlights in chronological order.

- SolarEdge Commercial Installer Certification
- SEL Relays Programming SEL Relays
- OSHA 10 & Fall Protection Certified
- Century College NABCEP Preparatory Advanced Courses
- Prime Digital Academy MEAN Stack Software Development
- RTF STAR Center Gas Turbine Engineering
- Lundeberg School of Seamanship Marine Engineering Program
- Caterpillar Diesel Engines Series 3500 and 3600
- Rolls-Royce MTU Diesel Engines Series 2000 and 4000, CM1 and CM2
- EMC/MTN Satellite Communications Technicians Course
- Bitzer HVAC Compressor Technician Course
- Department of the U.S. Navy Environmental Protection Coordinator