Philip Curtis

Minnesota, U.S.A.

Systems Engineer/Master Electrician

[+1-954-505-9494](tel://(9545059494))

[Phil@PhilCurtis.biz](mailto:Phil@PhilCurtis.biz)

[Linkedin/in/PhilCurtisBiz](https://www.linkedin.com/in/philcurtisbiz)

**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, CM1and CM2
* EMC/MTN Satellite Communications Technicians Course
* Bitzer HVAC Compressor Technician Course
* Department of the U.S. Navy Environmental Protection Coordinator