

# David R. Shaffer, PE

Warrenton, VA • 571-331-3492 • Shafferdr@PVESolar.com • LinkedIn: linkedin.com/in/davidshaffer

## Executive Summary

Senior Engineering Executive with 25+ years of experience delivering resilient, mission-critical power infrastructure across global sites under extreme operational conditions. Former electrical authority and program leader for the U.S. Department of State's \$40M/year global energy program. Designed and led Tier III/IV-equivalent power systems with 99.999% uptime expectations, including N to 2N generator plants, dual utility feeds, UPS, PDUs, BESS, and microgrids. Authored enterprise standards for BESS, generator paralleling, and LED security lighting. Proven communicator with executive briefings to Ambassadors and agency leaders, and a published speaker on critical infrastructure and energy systems.

## Core Competencies

- Mission-Critical Infrastructure (Tier III/IV) • Battery Energy Storage Systems (BESS) • Generator Plant Redundancy (N/N+1/2N)
- Dual Utility Feed Design • Microgrid Integration • Global Program & Capital Project Management
- Executive Briefing & Stakeholder Engagement • Engineering Standards & Policy Leadership
- Renewable Energy Strategy • Utility Negotiation & Grid Integration • PV + BESS Systems
- SCADA / Remote Monitoring / Power Conditioning • Commissioning (Critical Power Focus)

## Professional Experience

### U.S. Department of State – Bureau of Overseas Buildings Operations

Senior Electrical Engineer / Energy Program Manager | Washington, DC | 2005–Present

- Directed global critical power infrastructure across 70+ diplomatic facilities with Tier III-equivalent design standards.
- Led \$40M/year international energy program; delivered BESS + PV systems in 70+ countries (\$200M+ construction value).
- Developed and enforced enterprise standards for generator plant redundancy (N, N+1, 2N), BESS design, grounding, and LED security lighting.
- Coordinated with international utilities to secure dual-feed infrastructure and negotiated capacity expansions.
- Briefed U.S. Ambassadors and senior executives on power risk, energy strategy, and capital project scope.
- Commissioned generator sequence of operations, grounding networks, and emergency lighting systems.
- Directed cross-functional engineering teams and consultants across design, review, and

construction.

- Presented at industry events and contributed to publications on critical power and resiliency.

## **EAC, PC**

Electrical Design Engineer | Burke, VA | 2001–2004

- Designed electrical systems for U.S. Navy, Army Corps, NASA, Smithsonian, and diplomatic security upgrades.
- Delivered short circuit studies, lightning protection systems, and fire protection for mission support facilities.

## **PV&E Contracting, LLC**

Licensed Master Electrician | Virginia | 1995–Present

- Delivered commercial, residential, and light industrial installations. Deep hands-on expertise in grounded, bonded, and code-compliant systems.

## **Education & Certifications**

Bachelor of Science in Electrical Engineering – Pennsylvania State University, 2000

Professional Engineer (PE) – Electrical Engineering (Active)

Master Electrician – Virginia

Schneider Electric Data Center Certified Associate – Training Complete, Exam Pending

Certified Energy Manager (CEM) – Previously Held

Certified Carbon Reduction Manager (CRM) – Previously Held