

## **Bilgehan Donmez**

### **PROFESSIONAL EXPERIENCE**

#### **Longroad Energy**

*Director, Transmission Engineering* | Feb 2023 – Present

- Lead transmission engineering strategy for utility-scale renewable energy projects.
- Oversee interconnection studies, planning, and engineering execution to advance wind, solar, and storage projects.
- Collaborate with ISOs, utilities, and regulators to secure transmission access and ensure project viability.

#### **GE Research**

*Senior Engineer* | Mar 2022 – Feb 2023

- Conducted advanced research in grid modernization and renewable integration.
- Developed and applied modeling and simulation tools for power systems planning and operation.
- Supported innovation initiatives in transmission reliability and renewable energy performance.

#### **AMSC**

*Manager, Network Planning & Applications* | 2018 – Mar 2022

- Directed a team of engineers providing transmission system modeling and advanced network applications.
- Led utility engagements on system planning, renewable integration, and advanced grid control solutions.
- Guided project scoping, execution, and technical delivery for large-scale system studies.

*Senior Engineer, Network Planning & Applications* | Nov 2016 – 2018

- Performed network planning and applications analysis for grid modernization and renewable integration projects.
- Supported development of advanced superconducting cable and grid support technologies.

#### **ISO New England**

*Senior Engineer, Operations Support, Real-Time Studies* | Mar 2011 – Oct 2016

- Conducted real-time power system reliability studies, including:
  - Dynamic stability analysis, wind/renewable energy modeling, and performance assessment
  - Special protection systems, voltage/reactive transfer limits, and high-voltage mitigation strategies
- Authored and updated operating guides, transfer limit calculators, and system procedures.
- Coordinated with Local Control Centers, ISOs, and industry stakeholders on operations issues.

#### **National Grid**

*Transmission Planning Engineer* | Oct 2008 – Mar 2011

- Performed Power Flow, Transient Stability, Short Circuit, and EMT studies to assess system reliability.
- Conducted transmission expansion studies applying NERC, NPCC, NYSRC, and NYISO criteria.
- Presented study results to NYISO, NPCC, and other industry committees for approval.
- Supported siting and licensing of new transmission facilities.

## **EDUCATION**

### **Northeastern University – Boston, MA**

Doctor of Philosophy (Ph.D.), Electrical Engineering – Power Systems

Master of Science (M.S.), Electrical Engineering – Power Systems