



Internship at Berkeley Lab

Alex Moreira



Berkeley Lab's Grid Integration Group

- Berkeley Lab's Grid Integration Group Grid develops models and software solutions to support decisions around power systems planning, economics as well as electricity markets and policy.
- Examples of successful models developed by the Grid Planning and Economics team include:
 - The <u>Security-constrained AC OPF</u> algorithm, which received a top performer prize in Challenge 2 of the ARPA-e Grid Optimization Competition.
 - The <u>resilient distribution expansion</u> model, developed in partnership with the industry, which was recently made available as a <u>prototype tool</u>.
 - Different models for microgrid planning, covering different design aspects, such as <u>distribution grid</u> or <u>multi-energy</u> representations, included LBNL's <u>DER-CAM tool</u>.
- More information here: <u>https://gridintegration.lbl.gov/advanced-grid-modeling</u>

Internship at Berkeley Lab's Grid Integration Group

• We welcome interns that are interested in formulating and solving power systems optimization and simulation problems that have relevant practical value for real life applications

• The intern will be a Berkeley Lab Affiliate student during the internship period

 Additional stipend might be provided by Berkeley Lab's Grid Integration Group to support the intern's living expenses in the Bay Area during the internship

Thank You!

Alex Moreira AMoreira@lbl.gov

Addressing multi-time scale uncertainties in high renewable penetration grid