

Sandeep Muraleedharan Nair

nairsandeep0808@gmail.com • 8669866240 • Mumbai • [Linked.com/in/nairsandeep0808](https://www.linkedin.com/in/nairsandeep0808)

SUMMARY

Electrical power systems professional with extensive experience as a Transmission Planner at Burns & McDonnell India. Adept at various key work efforts, including Interconnection Application Support, Steady State Stability Studies, Reactive Power Compensation Studies, Injection Analysis, SC Study, Cap Bank Switching Studies, and RVC Analysis. Proficient in the use of software tools such as Siemens PSS/E, ETAP, ASPEN, AutoCAD, MATLAB/Simulink, and Homer Pro. Additionally, possess exposure to GE PSLF and Siemens CAPE. Actively engaged in Power Flow Programming Automation workgroups and regional power system summits. Skilled in collaborating with ISO and RTO entities across North America. Expertise in supporting zero-emission transportation initiatives through power system studies.

EXPERIENCE

*Burns & McDonnell India, **Associate Senior Engineer: Transmission Planner***

Dec 2024 - Present

Conducted Interconnection Application Support to ensure seamless integration of power projects.

Performed a range of critical power system studies, including Steady State Stability Studies, Reactive Power Compensation Studies, Injection Analysis, SC Study, Cap Bank Switching Studies, and RVC Analysis.

Utilized software tools such as Siemens PSS/E, ETAP, ASPEN, AutoCAD, MATLAB/Simulink, and Homer Pro for analysis and design.

Engaged in power flow programming automation workgroups and actively participated in regional power system summits.

Collaborated with ISO and RTO organizations across North America to ensure grid reliability.

- Provided support to the largest solar plant developer in the U.S., working on interconnection projects from the West Coast to the East Coast.

- Establish a special studies team: presently a group of Four Engineers to Interconnection applications to Commissioning support

- Build and support Python- Enfuzion based PSS/E Multi runs

- Support Injection Screening studies

- Consulting support to end client for any new special studies support

*Burns & McDonnell India, **Engineer: Transmission Planning (TP&PSA)***

Aug 2022 - Dec 2024

*GE Appliance (a Haier company), **Research Intern (IP patent wing)***

Oct 2021 - Aug 2022

*HPL Captive Power Plant / OMS Pvt Ltd. (subsidiary of OMS Mauritius) 116 MW Combined cycle cogeneration plant, **GET***

*Engineer Trainee, **GET Engineer Trainee***

Mar 2021 - Oct 2021

Gained one year of experience at a combined cycle captive power plant with a 116MW capacity.

Worked with plant assets, including GE Frame 6F Gas Turbines, boilers, CSTG, BPSTG, HRSGs, and BOPs.

*Orient Telematics Pvt Ltd. (2 Rotations), **GET Engineer Trainee, GET Engineer Trainee***

Jun 2019 - Mar 2021

*Indian Institute of Technology, Bombay, **Research Intern***

Dec 2018 - Jun 2019

Worked on a Research Project on Feedback controlled Magnetic Levitation of a body at a quasi-stable point

sponsored by: - IRCC IITB

Dept. of physics, IIT-B

EDUCATION

Government College Of Engineering Karad

***Electrical Power System** • 2019 - 2021*

University of Mumbai

***Bachelor • Electrical Engineering** • 2015 - 2019*

SKILLS

Power System Studies • Software Proficiency: Siemens PSS/E, ETAP, ASPEN, AutoCAD, MATLAB/Simulink, Homer Pro •
Interconnection Application Support • Renewable Energy Integration • Grid Modernization • Project Management •
Automation and Programming • Reliability and Stability Analysis • English • Hindi