PUBLICATION:

- J. Shukla, B. Das, V. Pant, "Stability constrained optimal distribution system reconfiguration considering uncertainties in correlated loads and distributed generations", International Journal of Electrical Power & Energy Systems, vol. 99, Pages 121-133, Jan. 2018.
- 2. J. Shukla, B. Das, V. Pant, "Consideration of small signal stability in multi-objective DS reconfiguration in the presence of distributed generation," IET Generation, Transmission & Distribution, vol.11, no.1, pp.236-245, 2017.
- **3.** B. K. panigrahi, R. Nandi, J. Shukla, "Evolution of nodal reliability and nodal prices for deregulated power", at International Conference on Recent Advances in Engineering & Computational Sciences (RAECS), India, 2015.
- **4.** J. Shukla, B. K. panigrahi, "An analytical approach for optimal size of distributed generation unit", at International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2014), Jaipur, India, 2014.
- **5.** J. Shukla, B. K. panigrahi, "Stochastic stability constrained optimal distribution system reconfiguration considering correlated loads and photovoltaic generation with varying penetration", is under review (IEEE system Journal).

JYOTI SHUKLA

PRESENT ADDRESS:

H.no.-138, Kailashpuri, Kota jn., India

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PROFILE

• Highly self-motivated and committed professional with experience of undertaking research and teaching activities in the field of Power System Engineering.

- Experience in modeling and simulation in analytical and numerical software, such as MatLab, PSCAD, AMPL and GAMS.
- Computer skills: Linux/Windows, Latex, C/C++.

EDUCATIONAL QUALIFICATION:

2013 – 2019 PhD in Electrical Engineering, Indian Institute of Technology, Roorkee, India.

Thesis Title: Small Signal Stability Constrained Distribution System

Reconfiguration

Status: Thesis Submitted.

Key Transferable Skills Gained:

• Extensive knowledge in area of stability constrained reconfiguration of distribution system in presence of renewable energy source based DGs.

CONTACT NO: (M) 06350116578

- Writing high quality research articles.
- Effectively mentor subordinates and/or peers in research projects.

2010 – 2012 M.Tech in Power System Engineering (with First Class), Indian Institute of Technology, Roorkee, India.

Dissertation Project: "Optimal Sizing of Multiple Distribution Generation in Distribution System".

2006 – 2010 B. Tech in electrical engineering (First Class Honours), University college

of engineering, Kota.

B. Tech. Project on "Microprocessor based Overcurrent Protection of

Single Phase Induction Motor".

2004 HSC (First Class) Govt. girls Sen. Sec. School, Kota.

Stream (Physics, Chemistry, Mathematics, Hindi, English.

RESEARCH AREA OF INTEREST:

- Distribution System Reconfiguration.
- Small signal stability analysis of distribution system in presence of renewable energy recourses.
- Optimization Techniques.
- Distributed Generation Planning.

ENGINEERING RESEARCH EXPERIENCE

<u>Indian Institute of Technology, Roorkee, India</u> <u>PhD candidate, 2013-2019</u>

Analyzed the stability aspect of a distribution system in the presence of DGs during distribution system reconfiguration (DSR). Proposed a novel probabilistic small signal stability constrained optimal DSR model for distribution system preventive control, for the first time in literature. Included the uncertainty and correlation between the system input variables such as the load and generation from SHPP, wind, and solar power plants along with detailed DG modelings (appropriate mathematical models) of different types (solar cell, wind turbines, and small hydro plant) in the stability constrained DSR scheme. Investigated the effect of varying level of power generation from renewable energy based DGs on DSR. Developed a methodology for determining the proper switching sequence to achieve optimal configuration from the original configuration.

PUBLICATION:

- J. Shukla, B. Das, V. Pant, "Stability constrained optimal distribution system reconfiguration considering uncertainties in correlated loads and distributed generations", International Journal of Electrical Power & Energy Systems, vol. 99, Pages 121-133, Jan. 2018.
- 2. J. Shukla, B. Das, V. Pant, "Consideration of small signal stability in multi-objective DS reconfiguration in the presence of distributed generation," IET Generation, Transmission & Distribution, vol.11, no.1, pp.236-245, 2017.
- **3.** B. K. panigrahi, R. Nandi, J. Shukla, "Evolution of nodal reliability and nodal prices for deregulated power", at International Conference on Recent Advances in Engineering & Computational Sciences (RAECS), India, 2015.
- **4.** J. Shukla, B. K. panigrahi, "An analytical approach for optimal size of distributed generation unit", at International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2014), Jaipur, India, 2014.

TRAINING COURSES ATTENDED

January 2018 Five day short term course on MATLAB & LABVIEW with its Hardware Interface through ICT at Rajasthan Technical University, Kota, India

February 2018 Training course on Teaching Skills at Indian Institute of Technology, Gandhinagar, India.

TEACHING EXPERIENCE:

GLA University, Mathura, U.P., India (July 2012 – June 2013)

• Position / Designation: Assistant Professor

University college of engineering, Kota, Rajathan, India (January 2018 – present)

• Position / Designation: Assistant Professor

Major courses: Power system dynamics and control, Power system operation and planning, Optimization techniques, Computer aided power system analysis.

KEY COMPETENCIES

- Willing to perform basic tasks and move on to solve complex problem.
- Able to learn new knowledge and adapt new environment quickly.
- Strong independent work style and excellent teamwork skills.