

CHRISTOPHER MICHAEL CHANCE

A passionate nuclear engineer with over 10 years of diverse nuclear industry experience. Extensive experience working with a variety of engineers. Previous leadership opportunities have crafted a team player, a motivator, an effective communicator, and a people leader.

CERTIFICATIONS

2018 – Present *Professional Engineer*
Licensed in South Carolina
ID#: 35460

ACCOMPLISHMENTS

2015 – Present *North American Young Generation in Nuclear (NAYGN)*

- Continental School Outreach Lead, 2020-present
- Carolinas Region Lead, 2020-present
- Local chapter officer roles including site vice president and site president, 2017-2019

2018 – 2019 *Leadership Oconee County*
Representative for Duke Energy in the graduating class of 2019

2001 *Eagle Scout*
Obtained the rank of Eagle Scout at the age of 12 years old.

LEADERSHIP AND MANAGEMENT SKILLS

TIME MANAGEMENT

- I generally keep my workload high both inside and outside of work. This requires me to be very deliberate with my time and utilize multiple time management skills in my daily life:
 - To-do lists both inside and outside of work
 - Prioritization matrices for tasks
 - Scaling rigor appropriately for tasks

ENGAGEMENT

- As NAYGN site president, I fostered an engaged member base leading our chapter to earn annual awards for most accomplished and most community service.

COMMUNICATION

- I filled the OCC roll of Emergent Issues Manager which required clear and concise communication with a variety of individuals. Furthermore, it required the ability to be dynamic on *what* is communicated based on the need of the individual.
- I can communicate difficult topics with people who may not have equal understanding of the topic.
 - I have effectively presented research findings and publication efforts at three separate conferences.
 - I have developed training material and taught merit badge topics to Boy Scouts (Engineering, Electricity, Energy, Nuclear Science, Emergency Preparedness, etc.)

DIRECTING AND OVERSIGHT

- I have been the Test Coordinator for Zero Power Physics Testing, directing and overseeing the actions of reactor engineers and operators and evaluating results of startup testing.
- I have organized the annual ONS Boy Scout Merit Badge College since 2018, which requires the coordination of over 20 volunteers, interface with the local scouting district, organize event logistics, and a public outreach and communication plan.

WORK EXPERIENCE

2015 – Present *Reactor Engineer*
Duke Energy, Oconee Nuclear Station
Seneca, SC

Supervisor: Ralph Williams, Ralph.Williams@duke-energy.com

- Perform regular reactor engineering duties: reactivity calculations in support of operations (shutdown margins, power maneuvers, estimated critical position and boron, etc.), monitoring and trending core performance, procedure maintenance, etc.
- Leader of the Site Reload Interface Team
- Engineering representative for the Outage Working Group
- SME for Self-Powered Neutron Detectors
- SME of the Reactivity Measurement and Analysis System (Framatome RMAS)
- Develop and instruct work group specific training

2018 *Interim Engineering Manager*

Duke Energy, Oconee Nuclear Station
Seneca, SC

Supervisor: Jay Ratliff, Jay.Ratliff@duke-energy.com

- Engineering manager for the mechanical components support team
- Managed a team of 7 engineers for a duration of 3 months
- Responded to and directed actions from emergent work
- Managed, directed, and approved nuclear corrective action program work
- Interfaced with and managed actions from the fleet working group

2012 – 2014 *Graduate Assistant Researcher*

Texas A&M University, Department of Nuclear Engineering
College Station, TX

Supervisor: Dr. Jean Ragusa, jean.ragusa@tamu.edu

- Used industry sub-channel analysis code (COBRA-TF) to model core blockage for both research style pool reactors and commercial PWRs
- Used COBRA-TF to validate the use of RELAP5 as a sub-channel analysis model
- All research was in support of Generic Safety Issue 191: Assessment of Debris Accumulation on PWR Sump Performance

2011 – 2012 *Student Researcher/Worker*

Texas A&M University, Department of Nuclear Engineering
College Station, TX

Supervisor: Dr. Cable Kurwitz, kurwitz@tamu.edu

SPACE ENGINEERING AND RESEARCH CENTER - July 2012 to Sept. 2012

Worked with a diverse team of engineers through NASA to design a bio-waste phase separator for use in a zero-gravity environment. My role was to develop a data acquisition code that could automate the collection of data on simulated zero-gravity flights (parabolic flight patterns in a Boeing-747).

SPENT NUCLEAR FUEL POOL TEAM - Sept. 2011 to June 2012

Member of an interdisciplinary and international collaboration investigating the use of phase change materials (PCMs) as passive safety features for spent fuel pools. We performed computational and experimental analysis on various PCMs and worked with nuclear plants in the Czech Republic to implement these passive design features.

RHRS ANALYSIS TEAM - Jan. 2011 to Aug. 2011

My team worked with the South Texas Project (STP) PRA department to calculate Residual Heat Removal (RHR) heat exchanger tube failure probabilities and perform leak rate analysis for the RHR heat exchangers at STP. We used Failure Mode and Effect Analysis and Event/Fault Tree Analysis to assess the RHR System (RHRS) at STP to determine all scenarios for a breach of containment.

EDUCATION

Texas A&M University
College Station, TX

- M.S. degree in Nuclear Engineering, 2014
- B.S. degree in Nuclear Engineering, 2012
 - Minors in Radiological Health Engineering and Mathematics