# **Electrical & Computer Engineering Seminar**

## S M Shafiul Alam, Research Scientist, Idaho National Laboratory

Will present a talk entitled:

# The Black Start Field Demonstration with Idaho Falls Power - Preparation, Lessons Learned & What's to Come

**Abstract:** In the spring of 2021, Idaho National Laboratory (INL) collaborated with Idaho Falls Power to conduct a field demonstration of an islanded distribution grid's black start capabilities. This four-day demonstration involved two of the municipal utility's run-of-river hydropower plants, grid-scale load banks and an energy storage system. This presentation will cover some unique aspects of run-of-river hydropower that necessitated the use of the storage system, the preparation required for the demonstration, lessons learned and what's next.

**Bio:** S M Shafiul Alam is a research scientist in the Power & Energy Systems Group of INL's Energy & Environment Science & Technology Directorate. His work primarily focuses on technical assessment of energy storage integration with hydropower and marine hydrokinetic assets to enhance operational flexibility while enhancing reliability and resilience. Shafiul was the technical lead for system modeling, validation and laboratory testing of the ultracapacitor (UCAP) energy storage system used in the black start field demonstration with Idaho Falls Power. His detailed professional experience and research portfolio are available at <a href="LinkedIn">LinkedIn</a> and <a href="Google Scholar">Google Scholar</a>.

#### Zoom:

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Friday, October 21, 2022

## 4pm

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