

## **Open Standards-Based Approaches for the Exchange of Drone-Generated Data**

Utilities are adopting Unmanned Aerial Systems (UAS) for a variety of use cases. While initial projects focused on relatively simple inspections of utility assets, utilities are now recognizing the potential of more sophisticated drone applications. Rapidly advancing sensor payloads, autonomous navigation systems, optical recognition, and embedded artificial intelligence have set the stage for significant benefits in the electric distribution sector.

As vendors expand their commercial offerings for the utility UAS market, the diversity of products, control systems, and data schema will increase exponentially. Utilities will interact with many diverse vendors and service providers as they build out their drone programs, and EPRI foresees massive system integration and data management challenges.

EPRI is launching a project to develop open standards-based approaches for the exchange of drone-generated data in electric distribution applications. This presentation will outline the business case for utilities' participation in this project, discuss the project scope and approach, and highlight expected challenges. Key use cases to be modeled include distribution line patrols and point-of-interest inspections.