## RIAPS Usage Models

### Microgrid Islanding and Resynchronization
- Scheduled and emergency islanding
- Resynchronization and DER control
- Uses distributed computation and decision making
- Focuses on time-sensitive power management

### Remedial Action Scheme (RAS) for Under-Frequency Load Shedding
- Stop the frequency decline by quickly reducing the amount of load on the grid
- Adaptive for contingency scenarios and operating conditions
- Distributed coordination utilized to reach an agreement among RIAPS nodes
- Fault tolerance is supported by the operating system and RIAPS platform

### Remedial Action Scheme (RAS) for Wind Farm Generation Curtailment
- Decentralized Linear State Estimation (DLSE) and curtailment optimization
- Utilizing measurements and system status in control decisions
- Uses distributed algorithm to estimate state and calculate an optimal strategy
- Relies on fault tolerance capabilities of the platform