

SurvalentONE

Dynamic Voltage Regulation

Distribution automation software for precise, scheduled control of feeder voltages



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Utiliverse™ ecosystem

Dynamic Voltage Regulation manages voltage so that customers receive power that conforms to government mandated standards

Electric utilities must be able to efficiently manage voltages within their distribution networks so that customers consistently receive power that conforms to government-mandated standards, even during periods of peak demand.

SurvalentONE Dynamic Voltage Regulation (DVR) software leverages voltage regulators, load tap changers (LTCs), and smart grid technology such as AMI meters to automatically maintain feeder voltages within specified limits. Since SurvalentONE DVR does not require a network model, most utilities can install and use the application immediately.

With SurvalentONE DVR, utilities can reduce peak demand, prevent brownouts, conserve energy, achieve cost-savings, keep voltages within an optimal range, and maintain overall system power quality.

Shave Off the Peaks

SurvalentONE DVR takes the guesswork out of lowering peak demand because it continuously monitors field devices, sensors, and AMI meters, thus ensuring that the right balance is struck between demand reduction and end-of-line voltages.

During peak demand hours, the software is typically set to reduce feeder voltages to a user-defined lower limit.

At all other times, SurvalentONE DVR is usually set to only perform an action if the voltage falls outside the acceptable user-defined range.

The quality of service is maintained when utilities reduce demand during peak periods. The end customer experiences no change in electrical service and are less likely to lose power at the most critical times. Greater control over peak demand may also allow utilities to dispense with emergency conservation advisories, further improving the customer experience.

Optimize Feeder Voltages

The DVR algorithm optimizes the operation of all the regulators on a feeder to ensure that the proper voltage is set for all customers.

When DVR is active, feeder voltages may be controlled on a fixed schedule or manually by a control-room operator communicating to the regulators & LTCs through the industry standard protocols supported by Survalent.

Save Money

SurvalentONE DVR provides several potential cost-saving opportunities. For example, the application automates the voltage management process, so field crews no longer have to travel out to substations and along feeder lines to manually operate voltage regulators and LTCs. Utilities whose energy usage bills incorporate their peak energy usage can see substantial cost savings by using DVR.

SurvalentONE DVR may also allow utilities to qualify for conservation voltage regulation (CVR) and peak demand reduction incentive programs offered by their wholesale electricity supplier.

Benefits

- Lower peak demand
- Reduced risk of brownouts and blackouts
- Maintain consistent system power quality
- Better customer experience
- Optimized feeder voltages
- Cost savings from voltage optimization incentive programs
- Energy conservation

Key Features

- Two modes of control: minimum operation and minimum voltage
- Incorporates feedback from end of line devices such as AMI to ensure correct voltage levels throughout the feeder
- Ability to organize voltage regulators into a cascaded group within each feeder
- Scheduled and manual control when DVR runs
- Device communication via standard protocols such as DNP and Modbus
- Reporting tool for regulator usage statistics
- IED Wizard and Control Panel for device configuration and programming
- Alerts/alarms for telemetry failure, missing mandatory control points, connection errors, etc.
- Information sharing with third-party ADMS applications via ICCP and other protocols

Better Software. Better Decisions.

With Survalent, you can control your critical network operations with confidence. We're the most trusted provider of advanced distribution management systems (ADMS) and substation automation for electric, water/wastewater, oil & gas, renewable energy, and transit utilities across the globe.

Over 800 utilities in 40 countries rely on the SurvalentONE platform to effectively operate, monitor, analyze, restore, and optimize operations. By supporting critical utility operations with a fully integrated solution, our customers have significantly improved operational efficiencies, customer satisfaction and network reliability. Our comprehensive substation automation solution, Survalent StationCentral, delivers advanced control and monitoring for enhanced network performance and protection.

Our unwavering commitment to excellence and to our customers has been the key to our success for over 60 years.

100% Project Delivery. We Guarantee It. Ask Us How.

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