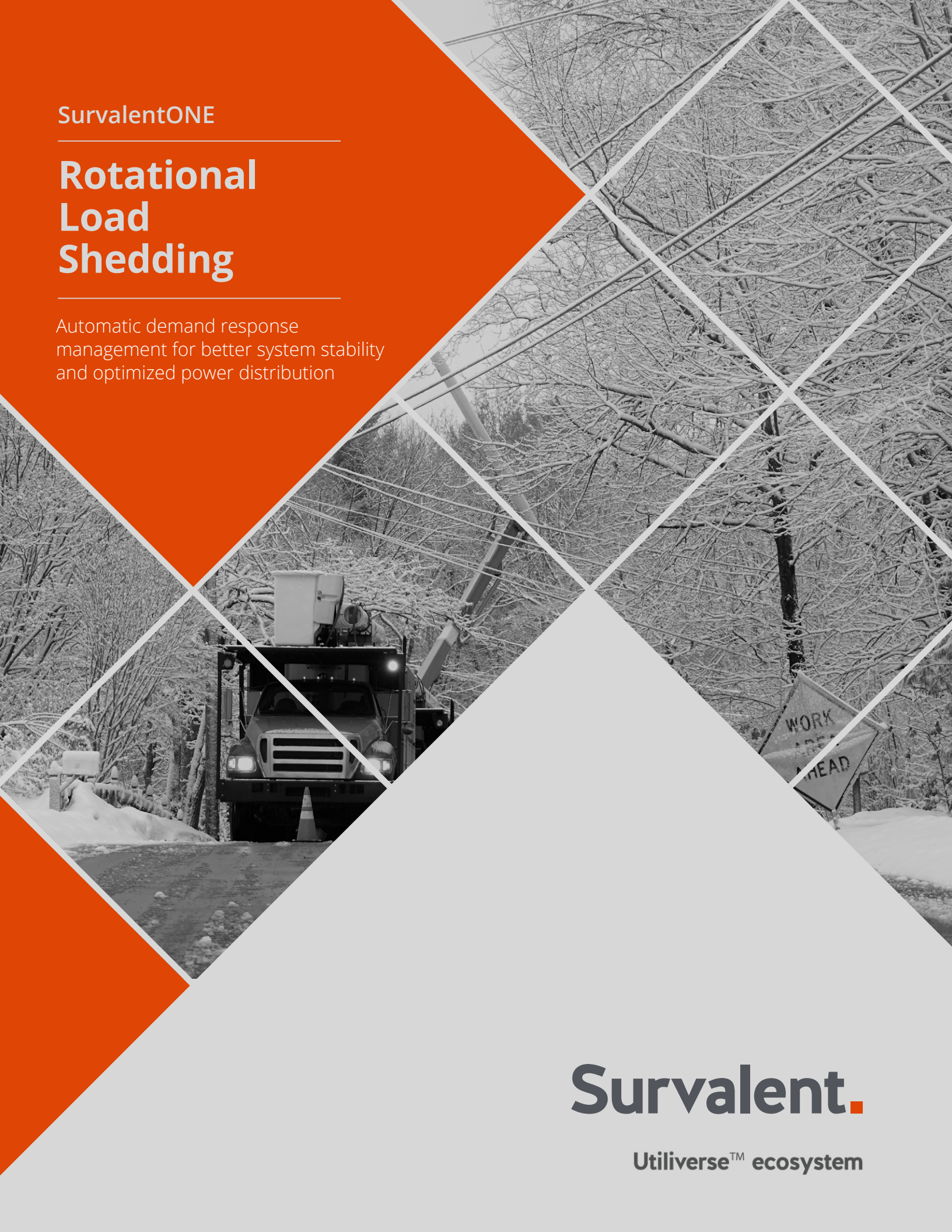


SurvalentONE

# Rotational Load Shedding

Automatic demand response  
management for better system stability  
and optimized power distribution



# Survalent.

Utiliverse™ ecosystem

## With SurvalentONE RLS you can prepare for the unexpected and safeguard against power overloads to ensure fair distribution with automated load shedding.

The ability to automate load shedding to balance an insufficient power supply with customer demand can be game changing for utilities, especially under high pressure and time-sensitive situations like winter storms, summer heat waves or other situations where power generation is lower than usual.

In such situations, utilities must conduct a high degree of analysis, planning, oversight, and coordination to perform manual load shedding across their network to avoid widespread, unpredictable outages due to overloads. This process strains the control room, leaves room for operator error, and results in overall customer dissatisfaction.

SurvalentONE Rotational Load Shedding (RLS) enables electric distribution utilities to automate load shedding in predefined network sections for consecutive, non-overlapping periods of time, producing a controlled rolling blackout on demand when electricity demand exceeds supply.

### Automated Prioritization

In the event of a power shortage, SurvalentONE RLS rotates de-energizing and then re-energizing different portions of the distribution grid on a scheduled basis to avoid a full system blackout and keeps the total demand within the available supply. With SurvalentONE RLS, utilities can pre-define segments of their distribution network that are eligible for load shedding, using breaker control sets and then prioritize these segments from low to high, to ensure that high priority, critical areas are only subject to rolling blackouts when necessary.

Once activated, SurvalentONE RLS automatically evaluates the breaker control sets and runs based on the execution method selected by the operator, until the scheduled stop time.

### Advanced Optimization Algorithm

SurvalentONE RLS can be run on a smart selection mode which uses an advanced optimization shedding algorithm to get as close as possible to the target shed amount by choosing the appropriate breaker control sets to ensure that excess load is not shed.

Alternatively, the operator can also choose to run the system in round-robin mode, in which the RLS will work through the list sequentially until the target shed amount is reached.

There is also a third option, where RLS orders the breaker control sets based on when they were last operated. RLS would then take that list, starting from the earliest time, and operate the breaker control sets sequentially until the target shed amount is reached.

### Highly Configurable

SurvalentONE RLS is a flexible solution that enables utilities to plan load shedding in advance and set parameters according to their specific network needs. The solution is configured at implementation to define breaker control sets, priorities, duration, intervals, and staggered restoration delay times to prevent surges as breaker control sets are restored. Upon activation, operators can define shed targets, as well as the scheduled start and stop time. If desired, RLS can be set to run continuously for multiple days until it is turned off manually. Operators can also set RLS to run everyday during the scheduled start and stop time. All RLS settings can be revisited and updated at any time.

### Statistical Reporting

SurvalentONE RLS enables utilities to generate high level statistical reports based on key metrics such as shed capacity, current shed amount, operational status, controlled schedule, number of controls, and date/time. These reports are presented in an easy-to-read table format to help users understand what occurred in the system during the event and process the data more efficiently.

---

### Benefits

- Automation eliminates the manual analysis and effort required to comply with mandated shed targets
- Controlled blackouts prevent system crashes and ensure greater system stability
- Granular control over planned outages and reduced risk of transmission authority intervention
- Reduced risk of human error caused by high pressure, constant switching procedures
- Better protection of critical network areas from unplanned, sustained outages
- Improved asset control and protection of equipment against surges
- Short, predictable outages help the customers in planning their day around it

### Key Features

- Consistent and predictable power distribution with controlled rolling blackouts
- Ability to track RLS operation based on KPIs like number of controls, minutes per control day, days on control etc. and generate on-demand reports
- Selective prioritization tailored to utilities' needs, customer base, and network set up
- Multiple configurable parameters for proactive, granular control over automated, rolling blackouts

## **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.**

# **Survalent.**

info@survalent.com • survalent.com • 905-826-5000

**Utiliverse™ ecosystem**