

PHILIPPINE UTILITY POWERS ECONOMIC GROWTH WITH STRATEGIC RECLOSING PROGRAM

S&C FEATURED SOLUTION:
TripSaver® II Cutout-Mounted Recloser

LOCATION: Davao City, Philippines

“With support from S&C, the TripSaver II reclosers have drastically improved the reliability of our grid, reducing outage times for customers and time spent by our crews locating faults. Having an expert team, based locally, has given us peace of mind that S&C is committed to supporting us here in the Philippines.”

*—Enriczar Tia, President and COO,
Davao Light and Power Company*



Customer Challenge

Davao Light and Power Company is one of the Philippines' largest electric distribution utilities, supplying power across the city and the wider Davao region. This area has a tropical rainforest climate, with year-round high temperatures and rainfall.

Its tropical climate is prone to severe weather conditions, animal intrusions, and hard-to-manage overgrown vegetation. These issues have caused temporary faults to occur regularly along laterals and at the edge of the grid, resulting in extended power outages for customers.

These challenges were already straining Davao Light's ability to maintain reliable service. However, the situation was further compounded by the city's rapid economic expansion.

The economy of Davao City is one of the fastest-growing in the Philippines, with new high-rise buildings, a rapidly increasing population, and new businesses. This accelerated growth placed significant pressure on the existing electrical grid.

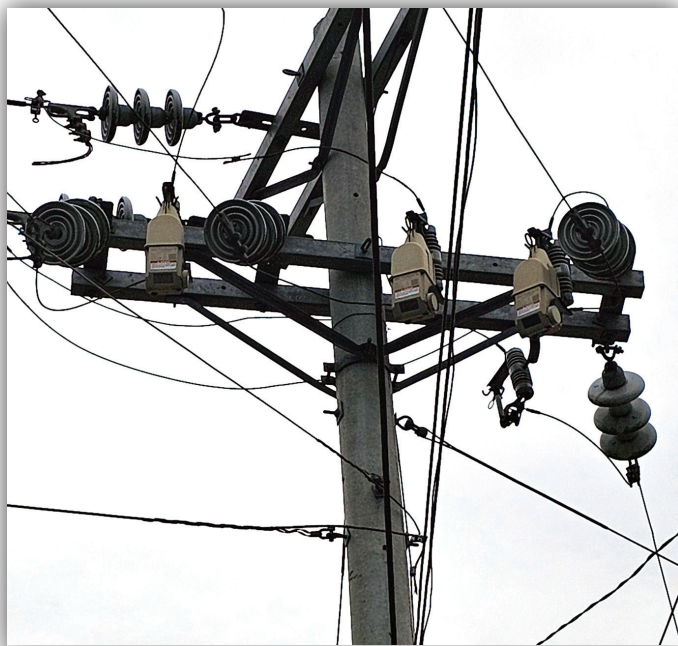
As the city's infrastructure expanded, even short outages disrupted business operations, hindered productivity, and slowed economic momentum.

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For Davao Light, this meant maintaining grid reliability was no longer only a technical challenge, but also a critical enabler of continued economic development.

As Davao Light assessed ways to make quick, measurable grid-modernization updates, it focused on updating its fuse protection strategy. Its existing approach involved fuse cutouts, which meant that when temporary faults occurred, they created sustained interruptions and forced the utility to dispatch a repair crew to locate the fault, resulting in:

- Hours of work to locate and replace the fuses, sometimes taking up to half a day to locate the fault due to heavy traffic in some areas
- Extended power outages and longer restoration times for customers
- System Average Interruption Duration Index (SAIDI) of 430 minutes and System Average Interruption Frequency Index (SAIFI) of 10.49
- Increased operation and maintenance expenses for the utility



TripSaver II reclosers installed on Davao Light and Power Company's network.

S&C Solution

To address the growing reliability challenges further driven by Davao City's rapid economic expansion, Davao Light launched a comprehensive reliability improvement program. This initiative aimed to build a long-lasting grid capable of supporting increasing customer loads and minimizing service disruptions. This program included implementing the latest technology to create an efficient and reliable grid.

S&C connected with Davao Light to discuss a solution that would help reduce unnecessary outages and improve reliability: S&C's TripSaver® II Cutout-Mounted Recloser.

The TripSaver II recloser replaces lateral fuses and automatically restores power when a temporary fault occurs. With 63% of faults on overhead lateral lines caused by temporary issues for Davao Light, TripSaver II reclosers offered immediate benefits to address their reliability concerns with storms, overgrown vegetation, and animal intrusions.

Davao Light was also interested in the TripSaver II recloser because it:

- Can be used as a direct replacement for fuse cutouts
- Is easy to install
- Closes back into the cutout after a temporary fault without requiring a replacement unit

The utility started a trial with three TripSaver II reclosers. After quickly recognizing the value, Davao Light added 20 additional trial units in locations experiencing a high number of temporary faults.

S&C supported the trial by providing product demonstrations at Davao Light's office, hosting various training sessions at the utility's training camp and head office, and attending multiple installations to provide guidance and assistance on-site.

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Results

Following this trial, Davao Light identified three strategic locations across its distribution network where outages occurred more frequently and installed TripSaver II reclosers. Within one year of installation, these devices successfully cleared 32 temporary faults that previously would have resulted in sustained interruptions.

OUTAGES PREVENTED BY LOCATION	
LOCATION	TEMPORARY FAULTS
A	16
B	12
C	4
TOTAL	32

Temporary faults TripSaver II reclosers cleared in three locations within one year of wider deployment.

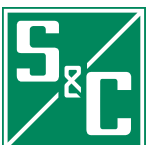
The success of the deployment of TripSaver II recloser encouraged Davao Light to continue implementing its reliability program across its network.

Six years after the initial trial of three devices, and alongside broader network improvements, including main feeder upgrades, three-phase reclosing and sectionalizing, covered conductor installations, and other reliability initiatives, the TripSaver II recloser contributed to significant performance improvements across the network. Over this period, Davao Light has achieved:

- Reduction in SAIFI: 10.49 to 3.40
- Reduction in SAIDI: 430 minutes to 260 minutes

Building on the performance of the earlier installations, Davao Light expanded its reliability strategy and continued its lateral reclosing implementation with 250 TripSaver II reclosers deployed across its network.

S&C has expanded its local team in the Philippines and maintains inventory locally so Davao Light can install units immediately.



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