INTEGRATED SOLUTIONS TACKLE THE NATION'S TOUGHEST CONDITIONS FOR FLORIDA POWER & LIGHT COMPANY

THE CHALLENGES

FPL's unique service area presents challenges.

1. **35** counties covered —including— **530** miles of coastline
2. Salt spray creates **corrosive environment**
3. **Fastest vegetation growth rate** —in— the US
4. **1st in US** —and— **2nd in world for rate of lightning**
5. **Most landfalling hurricanes** —of any— **state**

THE SOLUTIONS

FPL developed and implemented a comprehensive plan to improve reliability.

- **Redefined system performance** to include storms and other major events
- **Installed 4,000 IntelliRupter® PulseCloser® Fault Interrupters** that gently test for faults and segment feeders to small outage areas
- **Added 80,000 TripSaver® II Cutout-Mounted Reclosers** that test for faults on neighborhood lines, preventing outages and unnecessary truck rolls
- **Accelerated grid reconfiguration** with localized decision-making from IntelliTeam® SG Automatic Restoration System software
- **Dedicated a response team** with S&C to assess and repair damaged equipment after storms
- **Hardened their grid,** including undergrounding lines

THE RESULTS

"It's not simply one solution but several solutions that come together to make significant change. Extraordinary results come from a larger, multiple-item strategy."

– Ron Critelli, Senior Director of Power Delivery Engineering & Technical Services, FPL

- Reduced overall SAIDI by **15 minutes**
- Hardened feeders performed **46% better** on blue-sky days
- Faster storm recovery brought **$8 billion** in GDP back into Florida's economy
- **71% drop** in momentary outages and **93% drop** in complaints in 11-year period
- S&C IntelliRupter fault interrupters saved **4.2 million** interruptions within first 6 years
- S&C TripSaver II reclosers saved **8,500** interruptions within first 4 years
- Successes led to collaborating with S&C to invent **VacuFuse™ Self-Resetting Interruptor**
- Customer power rates remain **30% below** the national average

Hurricane Restoration Improvements	Saffir-Simpson Scale	Maximum sustained wind	# of customers affected	% of customers affected	50% of customers restored	95% of customers restored	100% of customers restored
Hurricane Wilma (2005)	Category 3	120 mph	2.1 million	75%	5 days	15 days	18 days
Hurricane Irma (2017)	Category 4	130 mph	4.4 million	90%	1 day	7 days	10 days

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