

Distribution Investments in Grid Resiliency

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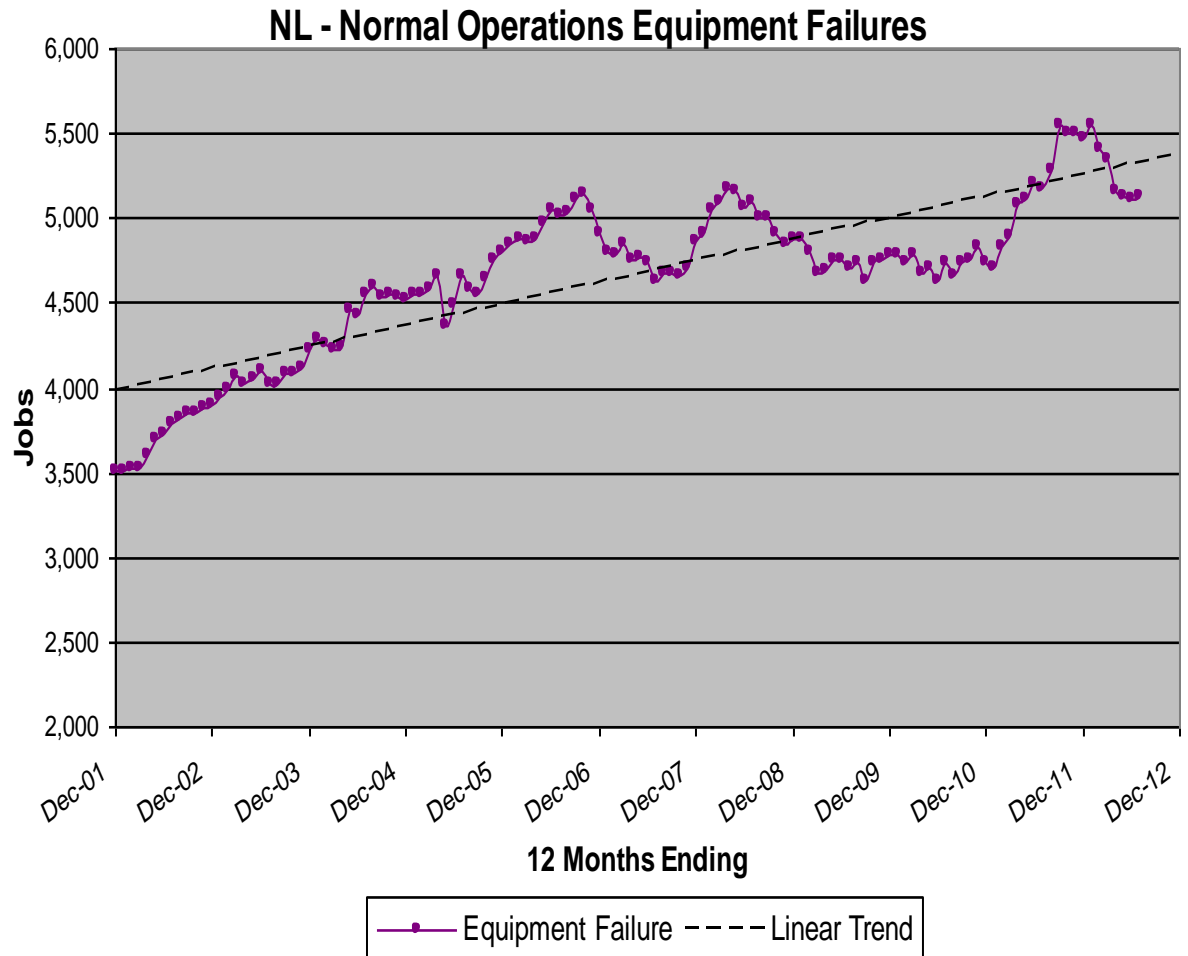
Overview of PPL Electric Utilities



- Providing safe, reliable electric service to 1.4 million homes and businesses in 29 counties
- Maintaining 50,000 miles of power lines, nearly 1 million poles
- Award-winning customer service – 22 JD Power awards

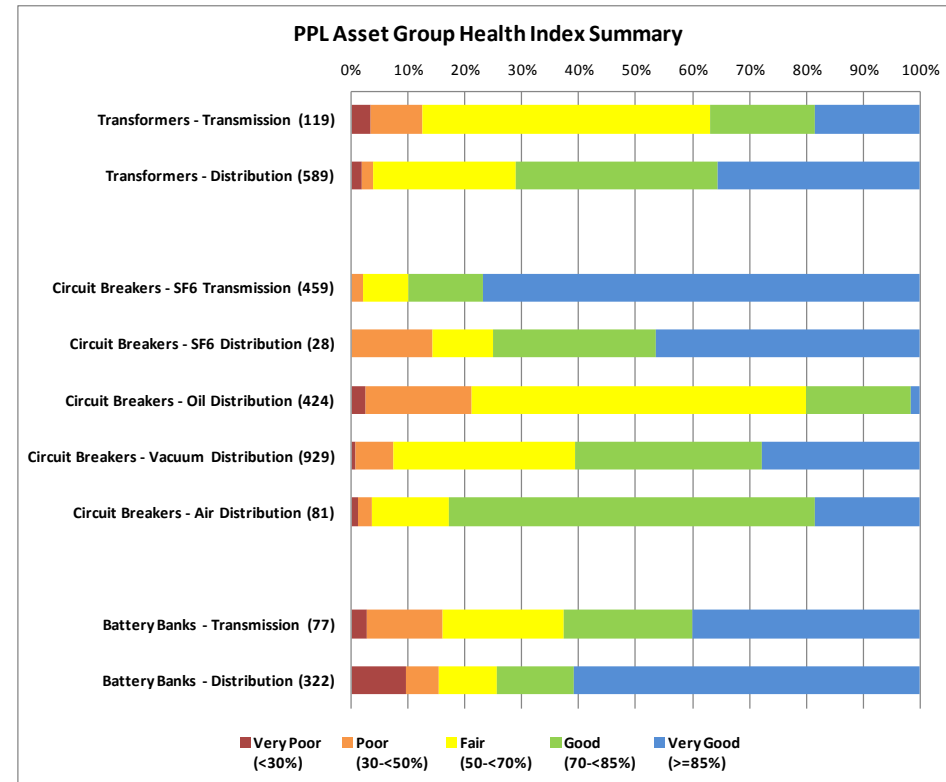
Addressing Aging Infrastructure

- Majority of infrastructure installed in 1960s
- Clear trend showing rising failure trends
- Study conducted in 2009 to determine how to reverse the trend – Asset Optimization Strategy



Program Strategy

- Programs to replace highest risk assets (condition + risk)
- Aggressive implementation of system protection – Distribution Automation
- Improving reliability of 5% worst-performing circuits
- Utilization of portfolio optimization tool focused on optimizing reliability benefit per dollar invested
 - Dozens of programs were evaluated, quantified, & ranked
- Development of a resource strategy to effectively execute significant ramp up in investment



PA Act 11 – Distribution System Improvement Charge (DSIC)



- Pennsylvania Act 11 of 2012 – Bill rider to recover investments in a timely manner
- Repair, improve or replace eligible property in order to ensure and maintain adequate, efficient, safe, reliable and reasonable services
- Requires the development of a Long Term Infrastructure Improvement Plan (LTIIP)
 - Justification of work
 - Units of work
 - Planned investments by location
- Annual process to ensure commitment to investments

Focus on System Reliability



Major programs under way to improve reliability

Significant capital investments

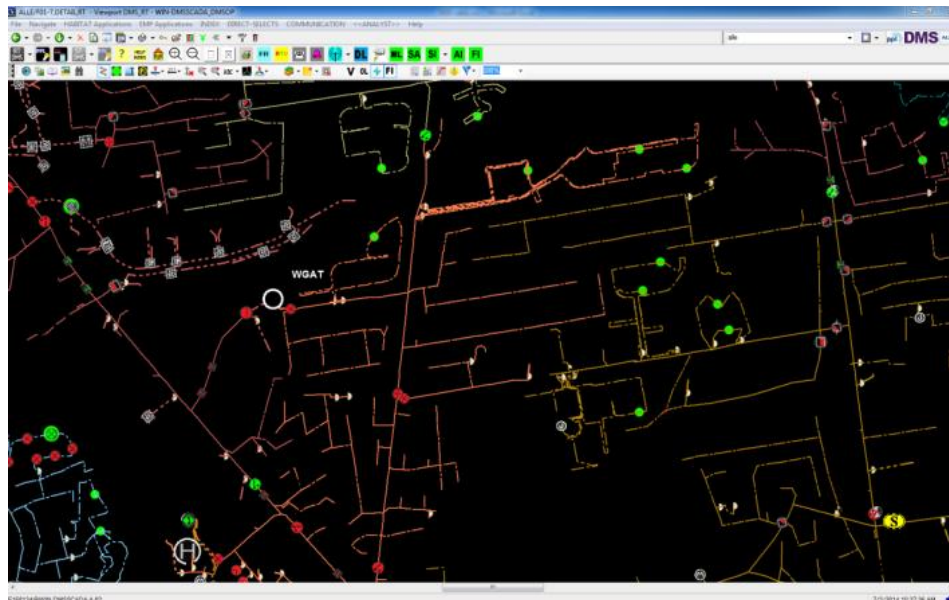
- Distribution Automation
- Storm hardening
- New circuits & substations
- New tie lines

Results: Steady decline in number and duration of power outages experienced by our customers

DSIC – Deploying the System of Tomorrow

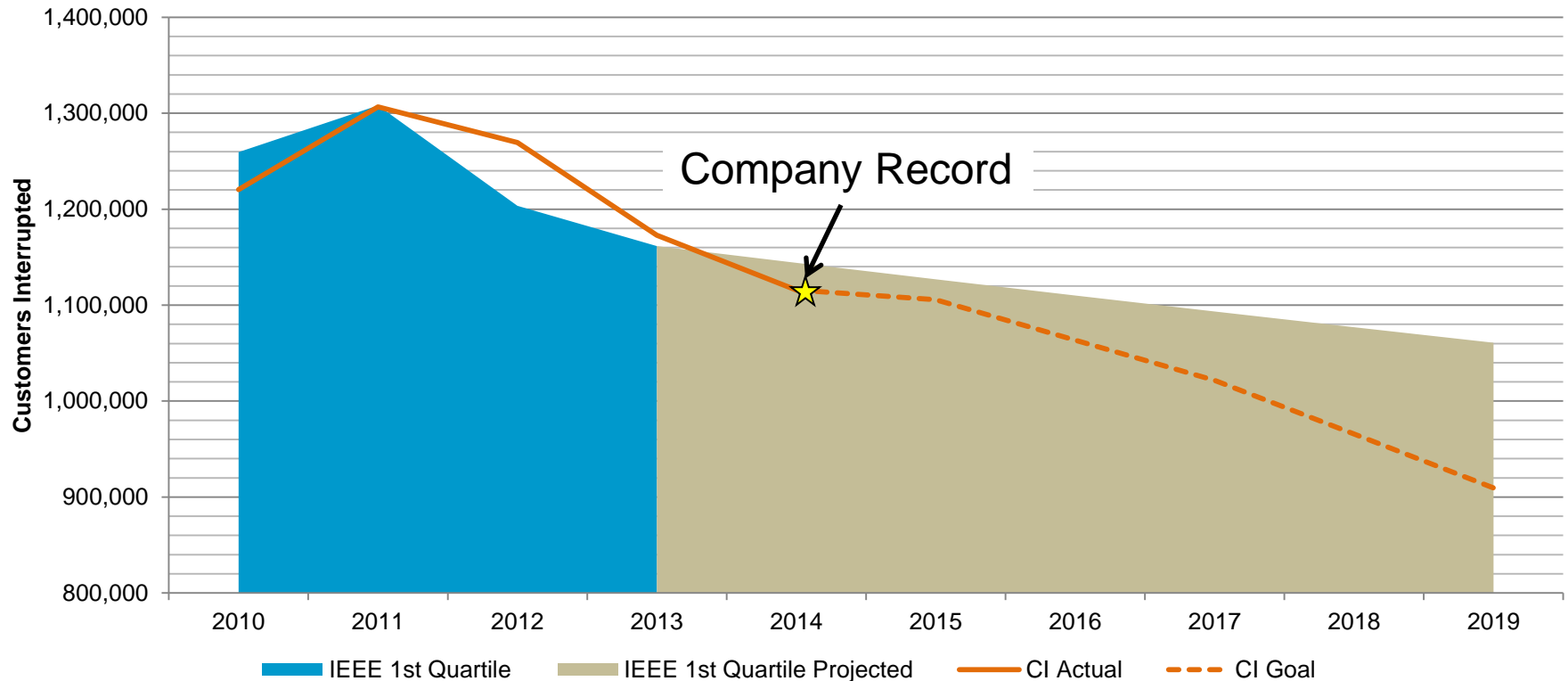
Distribution Automation

- Installing thousands of automated switches and sensors
- In areas where the equipment has been installed, it has reduced outage durations by an average of 30 percent.
- The implementation of our Advanced DMS will allow these operations to occur automatically which will avoid a significant number of permanent outages.



Significant Reliability Improvements – Focus on SAIFI

Reliability improvements have been significant, and will continue.



Overall, we expect to improve reliability by 31 percent between 2011 and 2019. Customer satisfaction scores rising with reliability performance.