MLGW ELECTRIC RELIABILITY

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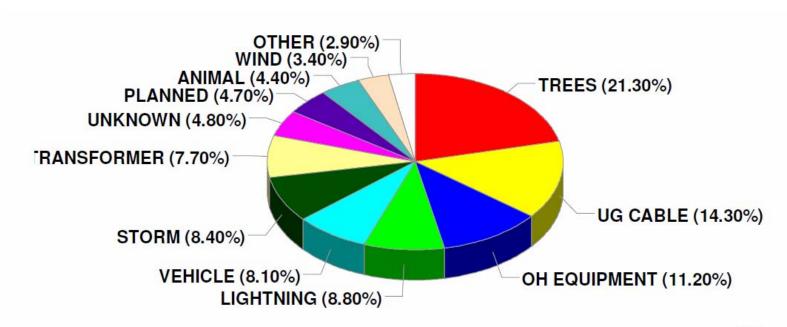


RELIABILITY METRICS

- Outages/year − 1.38
- ▲ Average duration/outage 114.8 Minutes
- ▲ Average time off/year 2.38 hours
- ∠ Power availability (distribution) 99.968%
- □ Power availability (transmission) 99.999%



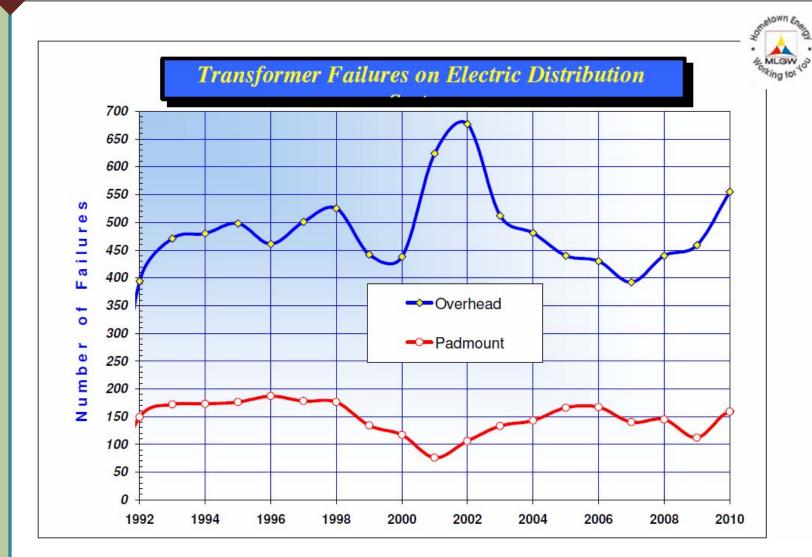
OUTAGE CAUSES





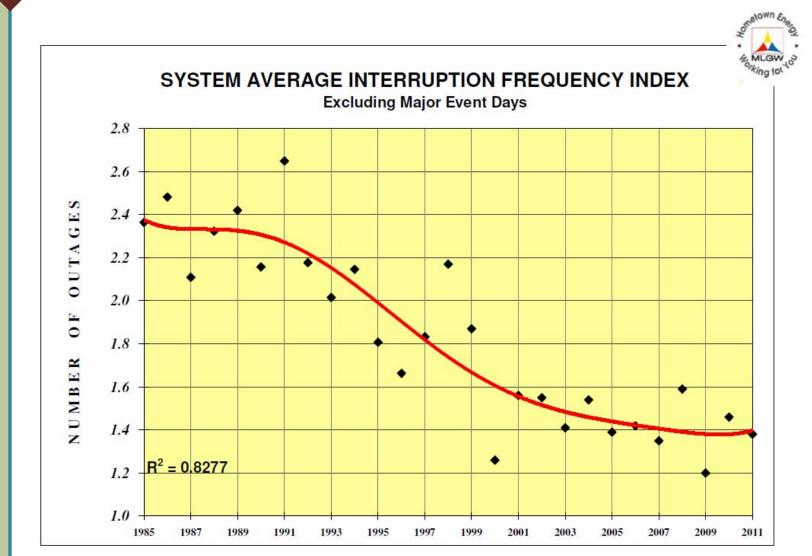


TRANSFORMER FAILURES





OUTAGE FREQUENCY





OUTAGE PREVENTION PROGRAM

- Analyze causes and develop mitigation strategies
- Recapitalization of system
 - Replacing outdated equipment with new, more reliable equipment
 - \$3M/year replacing underground cable proactively
- New substations
- Line inspections



OUTAGE PREVENTION PROGRAM

- Storm-hardening
 - Critical customers
 - Construction standards
 - Seismic prevention
 - Vegetation management program
- Outage duration improvements
 - Smart meters automatic reporting
 - Smart switches \$1.5M/year



RELIABILITY OVERVIEW

- Reliability and power quality are equally important
- Goals
 - Identify problem areas
 - Continually improve grid system
- Outages do happen
- Contact your Key Account Representative if you have reliability or power quality issues
- Key Account Rep and Reliability can help determine strategies to help customer
 - Alternate circuit, redundant transformers, backup generation, UPS, ride-through devices, etc.



QUESTIONS?

