



ALLBRITE ELECTRIC SERVICE, INC.

4450 N.W. 126th AVE., SUITE # 101 ♦ CORAL SPRINGS, FL 33065

PHONE: (954) 583-6788 ♦ FAX: (954) 323-5513

Providing **TEGG** Electrical Services

**Your
Electrical System Specialist
GUARANTEES
“Failure Is Not An Option”**

TEGG
SERVICE

SPECIALIZING IN ELECTRICAL SYSTEM RELIABILITY
SERVICE ♦ PRODUCTS ♦ EDUCATION

TEGG® ELECTRICAL ASSET MANAGER

Comprehensive Electronic Documentation
100% Tracking, Electronic One-Line Tree View
User Friendly Customer Interface

Site Visit Information

Agreement: ESA001

Location: ALL

Search: _____
by: Tag ID

- BCP 01 - Branch Panel RP-1
- BCP 01 - Branch Panel RP-2
- CONNECTIONS - Circ
- BCP 01 - Branch Panel RP-3
- BCP 02 - Branch Panel LFB
- BCP 02 - Branch Panel LPA
- BCP 03 - Branch Panel LFC
- BCP 04 - Branch Panel LFB
- DP 01 - Distribution Panel
- DSS 01 - Disconnect Switch
- DSS 02 - Disconnect Switch
- DSS 03 - Disconnect Switch
- LCT 01 - Contactor 24
- LCT 01 - Contactor 1
- LCT 01 - Contactor 3
- LCT 02 - Contactor 2
- LCT 02 - Contactor 12
- LCT 02 - Contactor 23
- LCT 03 - Contactor 5A

Equipment Item Tree View

Agreement: ESA001 Site: Sample Company Store # 120

Search: _____
by: Tag ID

- SWG 01 - Switchgear, Utility Side
- SWG 02 - Switchgear
 - BCP 02 - Branch Panel PPH-1
 - BCP 02 - Branch Panel LPA
 - DSS 01 - Disconnect Switch-South
 - BCP 03 - Branch Panel LPC
 - BCP 04 - Branch Panel LFB
- SWG 03 - Switchgear
 - DSS 02 - Disconnect Switch HVAC-1 Middle
 - DSS 03 - Disconnect Switch HVAC-2 North
- TD 01 - Transformer Dry**
 - DP 01 - Distribution Panel
 - BCP 01 - Branch Panel RP-1
 - BCP 01 - Branch Panel RP-2
 - BCP 01 - Branch Panel RP-3
 - LCT 01 - Contactor 24
 - LCT 02 - Contactor 2

TD 01 - Transformer Dry

Nameplate | Variables | Problem History

Fed By: SWG 03 - Switchgear

Equipment Type: Transformer (Dry) Item Description: Transformer Dry

Location: Southeast Corner Main Service

Tag ID: TD 01 Critical Yes No

Manufacturer: ITE

Serial No.: N/A Model No.: 3F3Y112

Attribute Name / Units	Value
Voltage / Volts	312
kVA / kVA	112.5
Current / Amps	135
Primary Voltage / Volts	
Fuse Type / Model #	200/120
Primary Current / Amps	
Horsepower / Hp	480
Conductor/Bus Size / Text	150.0
Primary Conductor Size / kcmil/gauge	
Secondary Voltage / Volts	
Secondary Current / Amps	
Secondary Conductor Size / kcmil/gauge	

Application: Assembly No.-475A645JAG001R0 Safety Notes:




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Problem Count: 1 Tasks: Opened: 0 Aborted: 0 Completed: 0

TOTAL PEACE OF MIND
GUARANTEED

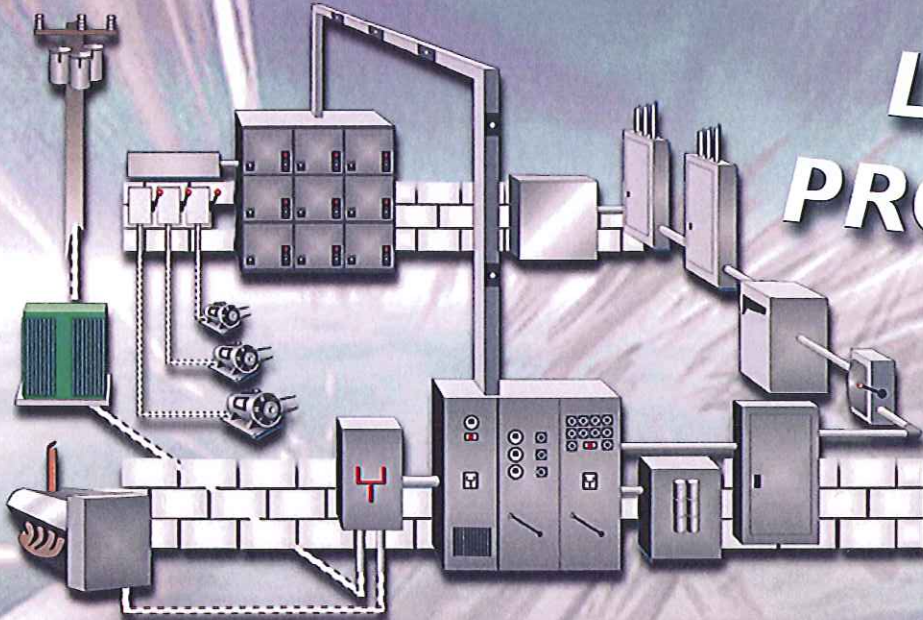


GUARANTEED PROGRAMS

TEGG
SERVICE

For Your
Electrical Distribution System

**LIFETIME
PROTECTION**



TEGG PRIME

- ✓ Energized and de-energized testing
- ✓ De-energized preventive maintenance
- ✓ Guaranteed repair or replacement on components that suffer a sudden and accidental breakdown
- ✓ Provides overtime for guaranteed repairs
- ✓ Includes extra expediting service (express freight)
- ✓ Includes downstream resultant damage protection for EDS
- ✓ Includes temporary power
- ✓ Includes emergency generator if required



TEGG PREMIUM

- ✓ Provides full energized testing and analysis
- ✓ Minor services such as exterior cleaning of equipment
- ✓ Comprehensive Electrical Systems Analysis reporting
- ✓ Guaranteed repair or replacement on components that suffer a sudden and accidental breakdown
- ✓ Provides overtime for guaranteed repairs



TEGG BASIC

- ✓ Utilizes thermographic and ultrasonic technology for analysis of the electrical system
- ✓ 90-day guaranteed repair or replacement
- ✓ Guaranteed repair service during normal business hours



TEGG BUILDERS

- ✓ Begins at the end of the new construction regular warranty period
- ✓ Energized testing
- ✓ De-energized testing optional
- ✓ Guaranteed repair or replacement on components that suffer a sudden and accidental breakdown
- ✓ Provides overtime for guaranteed repairs
- ✓ Includes extra expediting service (express freight)
- ✓ Includes downstream resultant damage protection for EDS
- ✓ Includes temporary power
- ✓ Includes emergency generator if required



FEATURES	BASIC	PREMIUM	PRIME
Visual Inspection	Yes	Yes	Yes
Infrared Thermographic Inspection	Yes	Yes	Yes
Ultrasonic Inspection	Yes	Yes	Yes
Comprehensive IR Report	Yes	Yes	Yes
TEGGTask View	Yes	Yes	Yes
Predictive and Proactive Service	No	Yes	Yes
Electronic Equipment Inventory	No	Yes	Yes
Energized Testing and Analysis	No	Yes	Yes
De-Energized Testing & Analysis	No	Optional	Yes
De-Energized Preventive Maintenance	No	Optional	Yes
GUARANTEED SERVICE	Yes	Yes	Yes
Guaranteed Repair and Replacement	90 Days	Life	Life
24 X 7 Emergency Call Out	Yes	Yes	Yes
Overtime for Repairs on Guarantee	No	Yes	Yes
Downstream Resultant Damage Repairs	No	No	Yes
Express Shipments for Repairs	No	No	Yes
Temporary Power (Wiring)	No	No	Yes
Emergency Power (Generator)	No	No	Yes

How To Care For The Electrical Distribution System Within A Government Facility



Common Problems

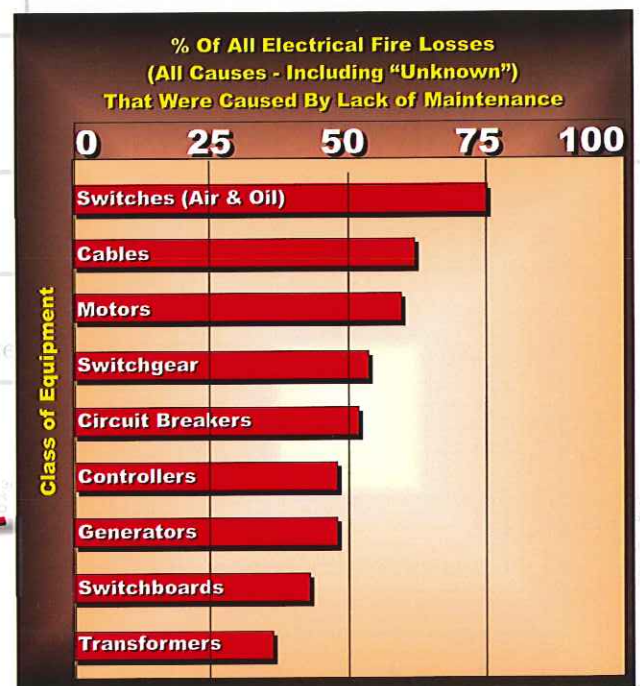
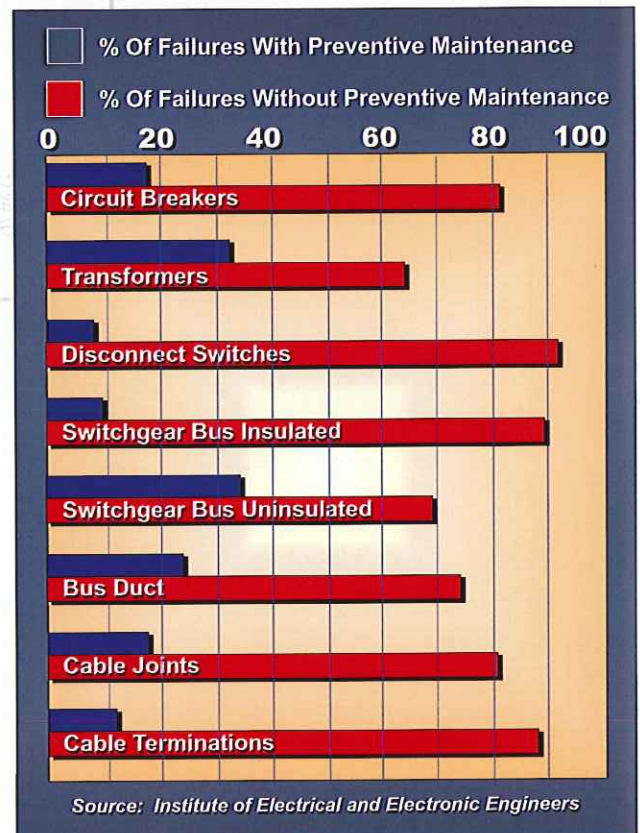
- Overloaded circuits.
- Code violations.
- Poor power quality.
 - Harmonics affecting critical systems caused by:
 - Computers.
 - Electronic lighting ballast.
 - Variable speed drives.
- Improper grounding due to:
 - New additions and upgrade.
 - Non adherence to the National Electric Code and/or IEEE 1159-1992 standards which are recommended practices for grounding of sensitive electronic equipment.
- Heavy energy usage:
 - This generates excessive amounts of heat that cause connections to loosen due to shrinkage and expansion. Loose connections cause arcing that generates extreme heat and high resistance, which is a major safety concern and also results in an inefficient use of power.
- Budget constraints.
- Inadequate surge protection.
- Insufficient backup generators.
- GFI certification.
- De-energized work to clean, tighten, lubricate and test is difficult to schedule.
- Aging infrastructures.
- Multiple and various types of facilities over wide regions.
- Maintenance department has many responsibilities.
- Limited tax allocations for preventive maintenance.

Critical Areas

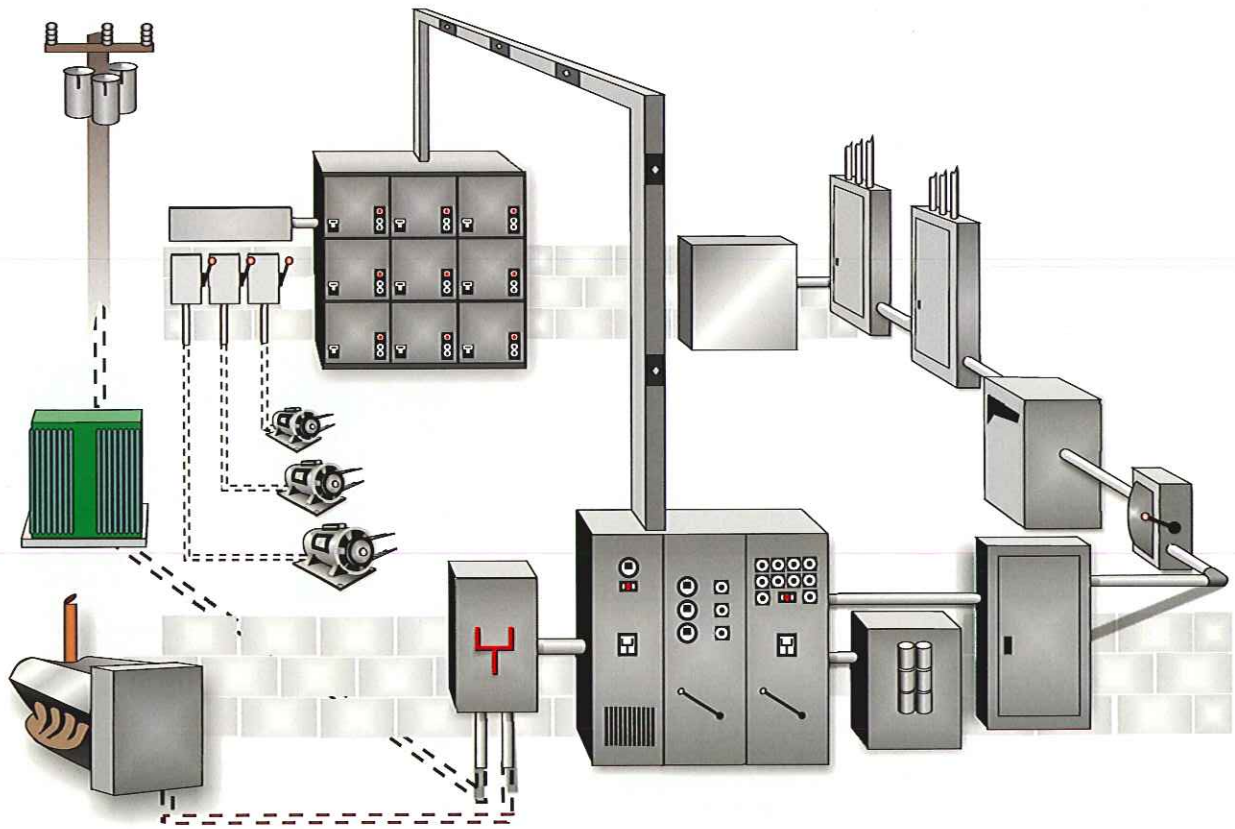
- Incoming service.
- Redundant incoming services, power supplies and back up emergency generation.
- Main transformer(s) oil & dry.
- Bus duct.
- Computer rooms.
- Databases and registries.
- Data collection centers.
- Security/surveillance systems.
- Lighting.

Financial Benefits of Electrical Preventive Maintenance

- Predictive budget.
- Minimize or eliminate unexpected outages and untimely repair costs.
- Extend the EDS life/lower replacement costs.
- Lower liability risks.
- **Greatly reduce electrical fires.**
- Computerized documentation for your electrical distribution system.



What to look for...



Electrical Distribution Systems

Electrical systems are mission critical to government facilities. These systems include transformers, electrical switchgear, distribution panels and cable structures. Manufacturing operations often produce dust and dirt or corrosive agents that can accumulate on electrical connections and can cause damaging short circuits and arcing. Aging and under maintained systems can overload or short out. Breakdown of electrical systems can frequently mean the loss of income and customers.



Business Equipment/Computers/Data Centers

Government facilities house large data centers that are often managed by executive level IS professionals. Office computers and data systems, printers, copy machines and fax machines are commonly found. Business equipment contains fragile electronic circuitry that can be damaged by power surges and other electrical fluctuations.



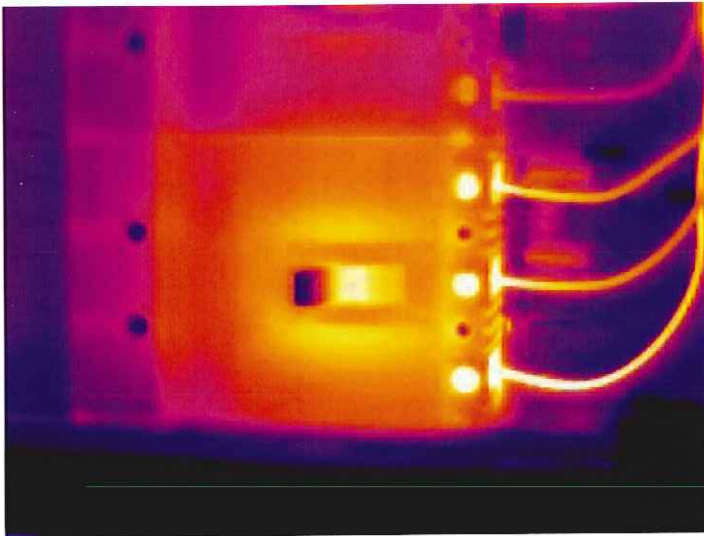
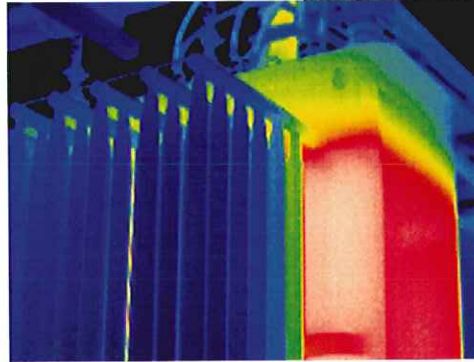
Security

Uninterrupted power is critical to these areas for obvious reasons. Electrical failure can affect security air conditioning, computers, etc. These risks can be extremely costly.

What to look for...

Power Transformers

Government facilities have transformers to step electrical power down to a level that can be used within the building. They are expensive to repair or replace and are subject to breakdown due to power surges, short circuits and aging insulation. The failure rate of transformers in the United States is expected to rise in the coming years as units installed years ago reach the end of their useful lives.



Electrical Panels

Electrical panels are an integral element of any electrical distribution system. The frequent cycling on and off of electrical loads creates heating and cooling, which can loosen connections in electrical panels and cause electrical arcing (or short circuits). Arcing can damage not just electrical equipment, but also result in surges and electrical disturbances that can damage other expensive equipment on the premises. Because of the critical function of electrical systems in any industrial environment, and the presence of fragile electronic controllers and PLCs, this type of facility should have an Electrical Preventive Maintenance (EPM) program that includes regular infrared scanning.

Electric Motors and Generators

DC and AC motors often have solid-state power supplies which are vulnerable to power surges. Rotating electrical equipment, such as process drive motors and pump motors, can be damaged by mechanical breakdown and electrical power disturbances.





Libraries



Capital Buildings



Military Bases



Law Enforcement Facilities



Record Archives



Security Stations

WHY POWER QUALITY MATTERS TO GOVERNMENT FACILITIES

POWER QUALITY PROBLEMS

- Harmonic Distortion
- Voltage Transients
- Voltage Sags and/or Surges
- Grounding
- Disruption Of Power
- Radio Frequency Interference (RFI)
- Electro-Magnetic Interference (EMI)
- Natural Phenomena



PRIMARY CAUSES OF ELECTRICAL LOSSES

- | | |
|---|-------|
| • Loose connections/parts | 30.3% |
| • Moisture | 17.4% |
| • Line disturbance (other than lightning) | 10.4% |
| • Defective/inadequate insulation | 9.9% |
| • Overloading/inadequate capacity | 2.4% |
| • Accumulation of dust, dirt and oil | 2.2% |
| • Lightning | 8.1% |
| • Foreign objects/short circuiting | 7.3% |
| • Collision | 3.9% |
| • All other causes | 8.1% |

Things Electrical Preventive Maintenance **WILL NOT DO:**

- Mail destroyed in a Post Office fire caused by electrical failure **WILL NOT** happen.
- Museum electrical fires **WILL NOT** occur and risk destroying priceless art and artifacts.
- Military facilities will not go down and national security **WILL NOT** be compromised.
- Detention facilities **WILL NOT** lose security and have extreme life and safety threats.
- Data centers **WILL NOT** be interrupted, information **WILL NOT** be lost and national security **WILL NOT** be compromised.
- Zoos **WILL NOT** risk the safety of animals, zoo keepers and visitors.
- Courthouses and lawmakers **WILL NOT** lose valuable time, costing tax payer dollars.
- Air Traffic Controllers **WILL NOT** risk life and safety.