AMEREN / CONTRACTOR SAFETY STEERING COMMITTEE

SUBJECT:

LOCATES OUTSIDE OF SUBSTATIONS

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Locates

Ray Pour, Ameren



LOCATES OUTSIDE OF SUBSTATIONS

STATISTICAL DAMAGE HISTORY FOR AMERENUE

AmerenUE Facility Damage, Statistics By Cause		2004		2005	
Total Damage Claims Both Electric and Gas	723		816		
No locate request made	304	42%	375	46%	
Located correctly but facilities still damaged	238	33%	245	30%	
Located incorrectly	94	13%	65	8%	
Other reasons, i.e. streetlight cable hits not counted	87	12%	131	16%	

Above numbers do not include hits by Ameren Construction crews



MISSOURI ONE CALL LAW

- Missouri law requires that any person making or beginning any excavation notify all underground facility owners/operators which may be affected by said excavation at least two but not more than ten working days in advance, except in the case of an emergency. Missouri law defines a "working day" as everyday, except Saturday, Sunday, or a legally declared local, state or federal holiday.
- An "emergency" is legally defined as a situation resulting from a sudden unexpected occurrence and presenting a clear and imminent danger demanding immediate action to prevent or mitigate loss or damage to life, health, property or essential public services.
- The notification center receiving such notice shall inform the excavator of all owners, operators and other persons to whom such notice will be transmitted and shall promptly transmit such notice to every public utility, municipal corporation and all persons owning or operating an underground facility in the area of excavation and which are participants in and have registered their locations with the notification center.
- ➤ "Excavation", any operation in which earth, rock or other material in or on the ground is moved, removed or otherwise displaced by means of any tools, equipment or explosives and includes, without limitation, backfilling, grading, trenching, digging, ditching, drilling, well-drilling, augering, boring, tunneling, scraping, cable or pipe plowing, plowing-in, pulling-in, ripping, driving, and demolition of structures, except that, the use of mechanized tools and equipment to break and remove pavement and masonry down only to the depth of such pavement or masonry, the use of high-velocity air to disintegrate and suction to remove earth, rock and other materials, and the tilling of soil for agricultural or seeding purposes shall not be deemed excavation. Backfilling or moving earth on the ground in connection with other excavation operations at the same site shall not be deemed separate instances of excavation.

MISSOURI ONE CALL EDUCATION LEVEL AT PRESENT



Ameren Contractors and AmerenUE

Discussions Held with the Following

Transmission Design and Construction

Substation Design and Construction
Divisions, both Design and Construction
Ameren Contractors

Discussion Findings:

Ameren Contractors

>Local 2 was contacted to determine if locate education was being provided to their membership.

Results: No formal education is given to members at this time either Journeymen or Apprentices.

Local 2 expressed a willingness to discuss adding this to their training

>Asplundh representative were contacted to discuss their training and policy regarding Locates

Results: No formal education is given at this time. GF's are responsible for locates.

Ameren Personnel

>Transmission and Substation design groups were contacted to determine present use of Locate information during design and during construction. i.e. design tickets

Results: Both groups do use locates at times during design. No formal locate policy or training is in place at this time in either Substation design or Transmission design

- >Transmission Construction in the past have not called in locate requests with MO One Call. No formal training program in place.
- Substation Construction obtains locates but are not in full compliance with MO One Call Law. No formal training program in place.
- >Several Ameren Construction Districts were contacted to determine present use of locate information during design. i.e. design tickets

Results: Design personnel, at times, call in locates for design purposes on company initiated projects.

Customers supply locate information to design on customer initiated projects

Construction Supervision is responsible for locates on maintenance projects.

Training videos on locates are viewed at times in construction districts.

No formal AmerenUE policy or formal training is in place for construction or design personnel.



CORRECTIVE ACTIONS / SOLUTIONS

Quick Hit Improvement Opportunities

No excavation to take place without obtaining a Missouri One Call ticket number.

Excavator to meet required time laws to allow locates to be performed

Excavator to white line proposed excavation area

Excavator to provide GPS points to Missouri One Call for locates not readily identified by physical addresses

Excavator to provide basic education to workers as to locate mark meanings and corridor requirements along located path

Utilize SM&P training session on District level to immediately elevate locate knowledge to construction personnel.

Facility owners to provide up to date facility maps to locators

List Of Potential Solutions / Improvement;

Recording of GPS coordinates on drawings

Require facility representative to be present when excavation is near critical facility

Refresher training for new hires when reporting to contractors

Formal Company policy on locates before digging

Include locate information in pre-job briefings

Include "Locate training" in refresher training for construction personnel both for Ameren and for Contractors

Include "Locate training" in Apprentice training for both Ameren and Contractors

Include "Locate training" for Design/Construction Supervision, both for Ameren and Contractors

Include "Locate training" for Design personnel

Include locate information in paperwork supplied to construction crews, both Ameren and Contractors



LOCATE IMPROVEMENT Sub-Committee Recommendations

- > Establish a corporate policy clearly defining Ameren's Excavation Policy
- **▶**Identify Central Responsible Organization to perform the following;

Become the primary focal point for outside groups

Identify existing and aid in development of procedures with regards to Locate law and Ameren policy compliance Communicate Missouri law or policy changes to all involved

➤Training

AmerenUE / Ameren Contractors

Development of training for both operating and design across all Ameren functions Development of locate training for all Contractors operating on AmerenUE properties

Training to be included in all journeyman refresher training

Training to be included in all apprentice training programs both design and construction.