

Austin Energy 138 kV Transmission Circuits, Tree Clearances
and Gracywoods Neighborhood Public Involvement

Austin Energy (AE) maintains two 138,000 Volt (138kV) electric transmission circuits, CKT 907 & CKT 977, from the McNeil Substation to the West through the Gracywoods neighborhood, located North of Braker Lane and West of Lamar Blvd. The two AE 138kV circuits connect McNeil Substation to Summit Substation and to Mag Plant Substation. Austin Energy line clearance activities in Gracywoods involve trees in approximately four spans of high-voltage transmission lines.

- 1939, Nov – LCRA acquired original easement on rural land for electric lines, granting “the right to remove from said lands all trees and parts thereof”.
- 1968, Oct. 16 – City of Austin acquired easement for electric lines, granting the right “to cut and trim trees and shrubbery and remove obstructions to the extent necessary”.
- 1969, Feb. – Dec. – CKT 907/908 were constructed on AE and LCRA easements. CKT 908 was later reconfigured and renamed CKT 977.
- 1981 – 1984 - Gracywoods Subdivision Sections platted and residential development begins in areas adjacent to AE & LCRA transmission easements.
- 2004 - Austin Energy notifies PARD and neighborhood association for line clearance and hazard tree abatement on CKT 907/977, followed by public involvement processes with Gracywoods Neighborhood Association (GNA). The resulting agreement is summarized below:
 - AE removed 22 declining/dying Arizona ash, 1 hackberry, 1 Chinese tallow tree
 - AE planted (106) 20-gal utility compatible trees (Dec 11, 2004)
 - AE pruned all trees to safe clearance for 4-5 year cycle.
 - Six live oaks trees West of Swearingen Dr. required heavy pruning to attain minimal clearance, and AE mitigated these trees with (29) 20-gal trees included in the total above. The mitigation agreement with GNA & PARD was that these live oak trees would be removed at a later date after the replacement trees are established.
 - AE mitigation costs \$10,000 +
- 2005, Feb - AE purchases property in easement at 11802 Swearingen from Resolution Trust Corporation. Property is retained by AE and not transferred to PARD.
- 2009 – AE notifies PARD and neighborhood association for routine line clearance activities on CKT 907/977, followed by public involvement processes with GNA. Trees in AE easement were pruned only to remove resprouts which have re-grown since last work in 2004. All 29 mitigation trees planted in 2004 (for phased removal of 6 live oaks) have become established. No tree removals.
- 2012, March 28 – AE PIREs sends notification to AE customers in Gracywoods neighborhood regarding possible pruning in greenbelt related to CKT 907 reconductor project. No response from GNA regarding tree issues.
- 2012, May 24 – AE Forestry sends Certified letters to GNA officers regarding line clearance tree work in GNA boundaries (related to CKT 934 FV-MC). No response from GNA regarding tree issues.

- 2012, Nov – PARD Forestry approved Vegetation Work Plans for line clearance work. General Permits approved for removal of 4 oaks in easement on AE property at 11802 Swearingen Dr.
- 2012, Nov. 29 - AE Forestry sends Certified letters to GNA officers regarding line clearance tree work in GNA boundaries (related to CKT 907 & CKT 977). No response from GNA regarding tree issues. AE calls PARD Walnut Creek manager to request meeting to inform of proposed work. Meeting denied. PARD's Jeff Larsen e-mails Bill Glass of GNA to inform him of AE plans to trim and remove trees, per the PARD approved work plan from November.
- 2012, Nov.30 - Mr. Glass calls Ray Henning and Carl Schattenberg, AE Forestry Section, with concerns and requests that no trees be pruned or removed and instead the transmission lines should be raised.
- 2012, Dec 5 - In response to calls from Mr. Glass and Mr. Nazor, Carl Schattenberg e-mails that AE will prune trees to assure public safety and that there was mitigation and agreement with the GNA to remove 6 live oak trees below the lines near Swearingen Dr. This e-mail from AE also stated that "AE will not remove any oaks" in this current maintenance cycle.
- 2012, Dec 19 – Mr. Glass reports to Urban Forestry Board on AE line clearance plans.
- 2013, Jan 10 – In response to request from Mr. Glass, AE Forestry requested costs from engineering for raising two structures between Swearingen Dr. and Bittern Hollow.
- 2013, Jan 22 - Mr. Glass reports to Parks Board on AE line clearance plans.

CONSIDERATIONS:

Recent field observations on 6 trees (estimates) - Between Towers 2 to 3 at Swearingen Dr,

- Estimated conductor height at maximum sag above grade 32' average for 6 trees
- Estimated tree height of six of the closest trees 18' to 22.5'
- Current Estimated Tree Clearance on six of closest trees at maximum sag 14' to 9.5'

Minimum Line Clearance Standards are 20 to 25 feet (25 feet for max sag at mid-span), for safe transmission line clearance to maintain a four to five year vegetation maintenance cycle.

Tree growth will resume with the onset of the growing season, further reducing safety clearances.

Once the clearances are less than 13'2", only Qualified Line Clearance tree trimmers are allowed to work on these trees, according to ANSI Z 133 minimum approach distances, and when clearance distances between trees and lines approach 5'2", AE will have to take an outage on these critical circuits to prune to prevent a tree-to-line caused fault and potential fatality.

Raising the structures on short notice is not possible.

Therefore, our only options at this time are:

- Prune or remove the most hazardous trees, and maintenance prune all other trees, as soon as possible.
- Prune all trees for line clearance maintenance and continue to investigate long-term solutions.