

Summary of Meeting #3 — Metropolitan Reliability Advisory Committee
May 27, 2008
5:30 p.m.
Robert J. Mohart Center

- The third meeting of the Metropolitan Reliability Advisory Committee was called to order at 5:36 p.m.
- After introductions of new members, Holmes reviewed ground rules— questions should come from committee members and ex-officio members only. She also reminded members to send ideas for potential substation sites to Merley McMurry by June 3.

- Steve Gilkey, Engineering, KCP&L, reviewed the designs of substations visited during meeting #2: Midtown, Forest, and Shoal Creek. In addition, photos and examples of newer substations were shown and discussed:
 - 103rd and Farley
 - Pflumm and Marshall (Lenexa)
 - 127th and Grant (Overland Park)

- In response to safety and health concerns related to Electromagnetic Field (EMF) raised at the first meeting, John Horn, Environmental Services, KCP&L, gave an overview of studies from European researchers who thought that they found a correlation between EMF and childhood leukemia. but were unable to duplicate their findings in subsequent tests.
- Occupational Safety Health Administration (OSHA), the World Health Organization (WHO), and the National Institutes of Health (NIH) introduced gauss as a measure of the intensity of a magnetic field. Levels emitted by transmission lines are very low, and are measured in milligauss. These organizations determined that exposure between 800 – 1000 milligauss 40 hours a week was a safe workers directly exposed to magnetic fields.
- To measure milligauss emissions from existing substations, Horn visited the Forest substation which measures 3 milligauss. The average home is between 2-4 milligauss. Storefronts along the Corridor measured between 11 and 24 milligauss. Other items measured for frame of reference were a Dyson vacuum cleaner (500 milligauss), a car's heated seats (12 milligauss), and the Mohart Center's pop machine (10-12 milligauss).
- Alternate committee member Michael Browder asked if KCP&L had a public education program on EMF. Horn indicated that KCP&L has relied upon the NIH Web site to provide information on EMF as a third-party resource.
- Committee member Norman asked if there is a way to contain or dispel an EMF (similar to a lightning rod). Horn indicated the best way to avoid an EMF is to maintain distance.
- Committee member Angie Splittgerber asked several questions regarding the measurements taken during Horn's visit to substations and other areas, including distance, location and calibrations of the gaussmeter.

- A question also was raised on the California Department of Health Services' report of a link between EMF and adult brain cancer. Horn said the WHO did not find their research acceptable.
- Horn closed by noting that studies indicate that utility workers directly exposed to transmission lines have no higher incidence of diseases than any other segment of population.
- Steve Gilkey addressed questions about specific power usage for the area. Ming Gao, distribution engineer, KCP&L, reviewed maps showing areas to be served by the new substation and how the Troost substation will work in concert with the other substations to alleviate power strains. Also reviewed were new major projects near the corridor (Children's Mercy Hospital, Saint Luke's Hospital, etc.)
- Committee member Bob Frazier asked about the percentage of power the new projects represent. Gao indicated the load would be spread across a number of substations.
- Ex-Officio member Stan Counts reminded the group that the projects mentioned are known projects, there may be others that have not been announced. Other developments that will need more power include new housing with all electric energy the potential development of a light rail system.
- Committee member Angie Splittgerber asked if the new substation would be equivalent in size to the Forest substation. Gilkey and Gao confirmed.
- Gilkey reviewed costs for substation placement two blocks east or west of Troost. KCP&L is willing to build off of Troost if necessary. Current cost estimates are based on the substation being on Troost. Gilkey provided additional clarification on distribution circuits and transmission line placements in response to questions raised by committee members.
- Site Selection: Gilkey outlined land requirements - flat grade, 200 x 270 feet - and displayed several concepts of guard walls that could be used. KCP&L will work with the community where the substation is ultimately sited on design elements.
- Committee member Bruce Gershon asked if KCP&L had a list of sites in mind, and if the company had condemnation authority. Gilkey indicated that there are a number of state regulations regarding condemnation authority; KCP&L does not wish to go down that path.
- Merley McMurry reminded the group that to avoid conflict with the Parks Department, sites should not be on Linwood or Armour Boulevards.
- The following locations were suggested during the site selection discussion:
 - 3000 block of Troost on West side between Harrison and Troost (would have to take out bread store and Andrea Carter building)
 - Between 31st and Linwood, West of Harrison (where the Defender building was located)
 - SE corner of 30th and Troost
 - 2500 block of Campbell (on East side)
- Committee alternate Peter Hughes stated that all sites under consideration would require discussion among the neighborhood representatives. Ex-officio member John

DeBauche agreed. The committee was reminded that these meetings are a forum to do so, and that they are free to meet individually and outside the confines of these meetings for their discussions.

- Responding to a question on Gas Insulated Substations (GISs), Steve Gilkey said KCP&L has no GISs in their territory. The biggest issue is prudence – GISs are usually constructed in dense downtown areas (such as Washington, D.C., Chicago, Houston, etc.) where there is no vegetation or single family homes. The Troost Corridor area does not meet this criteria.
- Holmes closed the meeting, reminding the committee to send site suggestions to Merley McMurry by June 3 and also encouraged committee members to meet amongst themselves to discuss potential sites along the corridor.
- For the next meeting of the Advisory Committee, KCP&L will address the following issues:
 - What is the power flow of a transmission line out of a substation?
 - What is the maximum energy usage on an 80 degree day in May?
 - What is the load growth as experienced from usage Power & Light District and Sprint Center?

Meeting adjourned at approximately 7:00 p.m.

The next meeting of the Troost Corridor Advisory Committee will be on Tuesday, June 10th at 5:30 p.m. at the Robert Mohart Center, 3200 Wayne, Kansas City, MO.