



SPECIAL USE  
PERMIT  
APPLICATION

for the

Peculiar 345 kV  
Substation

in  
Peculiar,  
Missouri

November 2008

Submitted by:  
KCP&L Greater  
Missouri  
Operations  
Company



Company Exhibit No. 3  
Case No(s). EA-2009-0018  
Date 2-19-09 Rptr pl

# **SPECIAL USE PERMIT APPLICATION**

**For the**

**Peculiar 345 kV Substation  
8901 East 203<sup>rd</sup> Street  
Peculiar, Missouri**

**November 2008**

**Submitted by:**

**KCP&L Greater Missouri Operations Company  
1201 Walnut  
Kansas City, Missouri 64106-2124**



October 3, 2008

Max Sherman  
KCP&L  
1201 Walnut  
Kansas City, MO 64106

RE: Noise Compliance Test for Peculiar Substation

Dear Mr. Sherman:

Burns & McDonnell completed a Noise Compliance Test for the Aquila Peculiar Substation in August 2005. The results of this noise compliance test showed that the substation was in compliance with the Cass County Noise Disturbance Ordinance (No. 02-20). Because the configuration of the substation has not changed and the operation of the substation has not changed, the substation should still be in compliance with the Cass County Noise Ordinance.

If you have any questions regarding anything stated in this letter, or the Noise Compliance Test, please feel free to contact me at 816-822-4252.

Sincerely,

Mary Hauner-Davis  
Manager, Air/Noise Department

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- US Army Corps of Engineers Correspondence
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Appendix G - Noise Study

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## **SPECIAL USE PERMIT APPLICATION**

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### **1.0 SPECIAL USE PERMIT APPLICATION**

#### **1.1 REQUEST FOR SPECIAL USE PERMIT**

KCP&L Greater Missouri Operations Company (hereinafter referred to as "Company", "KCP&L", or "KCP&L GMO"), formerly known as "Aquila, Inc.", has prepared a special use permit application for an electric substation site recently annexed into the City of Peculiar (City), and submits the application on behalf of itself, as lessee and operator, and City as owner. KCP&L, on behalf of the City, requests a special use permit for the substation site pursuant to the City's zoning regulations.

#### **1.2 APPLICABLE REGULATIONS**

The City has been in the process of updating its Master Plan and zoning regulations. The rezoning application for this site submitted in September 2008 referred to the Zoning Code of Peculiar, Missouri (Ord. No. 120379 §1, 12-3-79). Section 400-107 (B) of the new regulations, dated October 21, 2008 as posted on the City's web site, states that "All applications... submitted or approved prior to the effective date of this Code shall be governed by the regulations in effect at the time of the submission or approval." KCP&L is not certain whether the submittal date or approval date determines which regulations apply. Out of an abundance of caution, this application, consisting of change pages to the application submitted in September, refers to the new zoning Chapter 400 dated October 21, 2008.

Section 400-405 of the City zoning regulations provides that any land annexed into the City "... shall, at the discretion of the City Planner, be changed to A Agriculture or to the municipal zoning designation that most closely resembles the existing use of the property." At the time the property was annexed by the City, the site was zoned as Agricultural District (A) under Cass County zoning regulations.

Electric substations are not specifically listed as a permitted use in the Zoning Regulations, but "Public Facility, use or utility" is listed as permitted uses for District AG Agriculture (Section 400-410.1) and other districts, including District I-1 Light Industrial (Section 400-465.1) and District I-2 Heavy Industrial (Section 400-470.1). Because the property was zoned as Agricultural District (A) under Cass County zoning regulations at the time it was annexed into the





## **SPECIAL USE PERMIT APPLICATION**

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City, it appears the Agricultural zoning designation can remain unchanged and the existing use of the property can be continued under that designation.

### **1.3 STIPULATION**

This application is made with the stipulation that KCP&L will not construct, nor will it seek permission to construct, an electric generating facility on the parcel on which the Peculiar substation is located.

### **1.4 PROPERTY LOCATION AND SIZE**

The special use permit is being requested for the property containing the 345 and 161 kilovolt (kV) substation known as the KCP&L Peculiar 345kV Substation (Substation). The Substation site is approximately one-half mile west of 71 Highway and adjacent to the intersection of 203<sup>rd</sup> Street and South Knight Road (Figure 1-1). A detailed project description is provided in Section 2.0 of this application.

The size of the property for which the special use permit is being requested is approximately 55.05 acres and is generally located in the northwest corner of the northwest quarter of Section 5, Township 45 North, Range 32 West (Survey Drawing - Appendix A). The legal description for this parcel is located on the Survey Drawing in Appendix A. The Substation occupies 7.5-acres within the southern portion of the property (Appendix A). The remainder of the property is anticipated to remain undeveloped, with the exception of the existing transmission lines and gravel access road, thereby providing substantial buffer from adjacent parcels and 203<sup>rd</sup> Street.



# SPECIAL USE PERMIT APPLICATION





## **SPECIAL USE PERMIT APPLICATION**

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### **1.5 PURPOSE AND NEED**

#### **1.5.1 Substation Definition and Purpose**

A substation is the electric equivalent of a highway interchange or road intersection with traffic signals - it interconnects transmission and/or distribution lines of equal or varying voltages, thereby tying transmission line segments together to allow reliable operation of the transmission network as electricity moves from where it is made (generating plants) to customers who use it. The system of transmission lines and interconnecting substations is called the transmission "grid" or "network," and is used to deliver electricity that is made locally to local customers, and to interconnect utilities across the country and allow electricity to flow between different areas or regions. Transformers connect power lines of different voltages so that power may flow from one voltage to another. If there is too much traffic (e.g., power flow), switches and circuit breakers isolate the lines and interrupt the flow of power (analogous to use of traffic signals to control traffic at congested intersections or control access to highways). Without substations to protect the network, a transmission line overload could not be prevented or isolated; the network could not operate reliably; and reliable electric service to customers would greatly suffer. Expansion of the transmission network is necessary to allow utilities to meet their customers' growing need for electricity.

#### **1.5.2 Need for the Substation**

Growth in the need for electricity in northern Cass County has been substantial as new homes and subdivisions have been platted and built, along with businesses locating or expanding to serve those new homes and subdivisions. This has necessitated construction of electric infrastructure to support that growth, including the Substation that is the subject of this Special Use Permit Application. The number of KCP&L (formerly Aquila) customers in Cass County has increased 26% from 2001 to 2007. Electricity use per residential customer has increased 58% over the last 25 years, in addition to the growth in the number of customers. This Substation is a major part of the infrastructure needed to support that growth, and is designated critical infrastructure in accordance with various Homeland Security requirements (see Section 2.5).



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The Peculiar 345/161 kV Substation interconnects the existing KCP&L 345 kV transmission network to the KCP&L upgraded 161 kV transmission network in northern Cass County. This allows KCP&L to upgrade the existing 69 kV transmission to 161 kV transmission required in this area to supply existing load (e.g., customer demand for electricity) and load growth in the Raymore/Peculiar area for both KCP&L and the local rural electric cooperative. The Substation also provides required support for the KCP&L 161 kV transmission network in the Belton/Martin City area.

### **1.5.3 Benefit to the City**

The City of Peculiar now has substantial new transmission infrastructure on the northwest, west and south sides of the city to support development of the area - the Peculiar 345 kV Substation near 203<sup>rd</sup> Street and South Knight Road, the Peculiar 161 kV Substation on Highway YY west of Harper Road, and the South Harper Peaking Facility switchyard located south of 241<sup>st</sup> Street and west of Harper Road. This infrastructure, designed with capability for expansion, means the City of Peculiar has the electrical capacity available to reliably support the needs of present and future customers for years to come, and to immediately service the needs of large industrial and/or very large commercial customers seeking a suitable location for a new facility or expansion of an existing business.

Peculiar is the only city in Cass County with such a large electrical capability for economic development. For example, the expansion capability designed into the Peculiar 345 kV Substation (all inside the existing substation fence) is sufficient to supply an additional 20,000 homes, two dozen tall office towers, or four data centers (server farms). Combined with access to a major four-lane highway in the region, the Substation and other electric infrastructure described above provide significant advantages to the City in the competition for new businesses, growth, and economic development.

### **1.6 COMPLETED APPLICATION FORM**

A completed and signed Application Form is included within this Application and is located after page 1-7. The required filing fee is also provided.



## **SPECIAL USE PERMIT APPLICATION**

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### **1.7 LAND USE COMPATIBILITY**

#### **1.7.1 City of Peculiar**

Both the Existing and proposed Future Land Use maps for the City show the property as a Public/Quasi-Public classification. The Existing Land Use Map - Northwest shows the land surrounding the site within the Peculiar City limits as Ag/Open Space. The Grand Oaks Farm subdivision is on the north side of 203<sup>rd</sup> Street. There are also several residences southwest of the site, west of South Knight Road.

The Facility appears to be consistent with current site and neighboring land uses. The Substation property and neighboring properties contain a high-voltage electric transmission line and water supply pipeline. Farmland is south, east and west of the site. Several residences are west of the site. There are several residences on the south side of 203<sup>rd</sup> Street approximately 1/3 to 1/2 mile east of the property and substation, within City limits. The location is clearly in a transition from rural use to a more urban environment as the area north of the site is being developed. As the City completes and implements its revised Master Plan, further development is expected particularly once a Highway 71 interchange at 211<sup>th</sup> Street is constructed. The site is located south of 203<sup>rd</sup> Street, one block from the frontage road (Peculiar Drive) next to Highway 71, a major arterial in that part of the county. Ready access to the property is via a gated entrance driveway. Non-agricultural traffic can access the site via the frontage road to 203<sup>rd</sup> Street. Land use in the area, as described below, is a mix of residential and agricultural, with the bulk of the property adjacent to the Substation being agricultural.

The northern portion of the property currently consists of open agricultural lands and some forested areas associated with two intermittent streams that traverse the property. Surrounding areas are also designated as Multi-Use Tiers by the Cass County Comprehensive Plan land use map, although the Grand Oaks Farms residential development immediately north of 203<sup>rd</sup> Street may be designated as an Urban Service Tier, as defined by the Cass County Comprehensive Plan land use map. The property outside the Substation fence that is not dedicated to road access is anticipated to remain as its' current use, agriculture.

Adjacent properties within 200 feet of the Substation site are zoned as agricultural or residential.



## SPECIAL USE PERMIT APPLICATION

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It is believed that construction and operation of the Substation does not adversely impact local infrastructure (roads, schools, etc.) as the Substation is not normally staffed and the majority of workers that visit the site are from the region and commute to the site from their existing homes.

### 1.7.2 Cass County Comprehensive Plan Compliance

Prior to annexation of the site by the City, a Multi-Use Tier designation applied to most if not all of the site under the Cass County Comprehensive Plan Update 2005 (Plan - dated February 1, 2005). Multi-Use Tier is defined by the Plan (p. 25) as follows:

*"These are areas near towns and cities and along paved highways and thoroughfare roads where non-agricultural development, such as commercial and industrial uses, and residential development that is denser than 20-acre lots, is encouraged. Large-scale development is allowed, including commercial and industrial zoning, provided there are provisions for direct access to paved roads." [Italics added]*

The southern portion of the site and property east, south and west of the site, are designated as Multi-Use Tier on Cass County's Land Use map in the Plan. The southern portion of the site is where the Substation is located. Use of the site for the Substation, as located, appears fully consistent with the Multi-Use Tier definition.

The Plan also specifies characteristics of the Multi-Use Tier designation on page 28:

"The Multi-Use Tier is representative of development areas within Cass County that exhibit the following characteristics:

- Positioned as *transition areas from urban to rural densities*
- *Located along rural highways, major arterials and intersections, or close enough to such major roads to provide access for more intense levels of non-agricultural traffic, and*
- *Predominantly developed for a mix of land uses: residential, industrial and commercial purposes."*

The site is consistent with these characteristics. As described above, it is located south of recently developed residential properties that are located on or north of 203<sup>rd</sup> Street. Farmland is south, east and west of the site. Several residences are west of the site, and 1/3 to 1/2 mile east of the site. The location is clearly in a transition from rural use to a more urban environment as the area north of the site is being developed.



## **SPECIAL USE PERMIT APPLICATION**

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### **1.8 CERTIFIED LIST OF PROPERTY OWNERS WITHIN 200 FEET**

A certified list of property owners within 200 feet of the entire 55.05-acre parcel is provided as Figure 1-2. This list is the same one provided with KCP&L's September 2008 submittal.

### **1.9 TITLE REPORT**

This is provided in Appendix B.



## 2.0 DEVELOPMENT/SITE PLAN

### 2.1 PROJECT DESCRIPTION

#### 2.1.1 Present Configuration

The approximately 7.5-acre portion of the property discussed in Section 1.4 contains the 345 kV substation and system protection enclosure. A confidential site layout drawing is provided in Appendix C. The drawing is confidential because the Substation is subject to several Homeland Security laws and regulations. Because of this, certain components of the substation are not for public viewing.

The Substation (Appendix C) is a 345/161 kV substation and allows for the transfer of energy from 345 kV to 161 kV and vice-versa. Two (2) 345 kV transmission lines enter and exit the substation, while two (2) 161 kV transmission lines enter and exit the substation. One of the 161 kV lines connects to the Belton South 161/69 kV substation, while the other connects to the South Harper Peaking Facility 161/69 kV Substation.

The system protection enclosure is approximately 16 feet by 50 feet. A Cass County building Permit was obtained for this enclosure. The location of the system protection enclosure is depicted on the drawing in Appendix C.

A gravel access/entrance road was constructed for this project. A Roadway and Bridge Driveway Permit was obtained from the County, since it connects to 203<sup>rd</sup> Street.

KCP&L GMO proposes to chip and seal the access driveway on the 55-acre parcel, from 203<sup>rd</sup> Street to the substation fence, including any required parking area. This is a special condition submitted with the previous application, and is restated here for completeness.

Temporary on-site gravel parking was provided during construction. A gravel parking lot was constructed and allows for 10-12 vehicles. It remains in place at the present time but will be largely removed as part of implementation of a Storm Water Management Plan provided in Appendix H.





### **2.1.2 Design for Expansion**

Appendix C shows the layout for future expansion, consisting of one additional 345/161 KV transformer to provide additional network support and four 161/12 KV transformers that will allow this substation to provide a high level of reliable service to area customers.

## **2.2 CHAPTER 100 OWNERSHIP STRUCTURE**

The property and Substation are owned by the City under a Chapter 100 bond arrangement. A copy of the Economic Development Agreement between Aquila, Inc. (now KCP&L Greater Missouri Operations Company) and the City, dated December 30, 2004 is provided in Appendix D. The agreement remains in effect as long as any bonds remain outstanding or any phase of the Project (which also included the South Harper Peaking Facility) is titled in the name of the City, or termination in accordance with the provisions of the bond documents. The maximum term is thirty years. Under the arrangement, the City holds title to the Project (including the Substation site) and leases it back to Aquila (now KCP&L GMO) for an up-front bond issuance fee and specified bond interest and principal payments which are paid through the bond trustee to the bond holders (KCP&L GMO). An annual PILOT (Payments in Lieu of Taxes) of \$241,821/year is also made which under Missouri law is distributed to the public entities in whose footprint or service area the project resides.

Section 3.03 (c) of the Economic Development Agreement provides that the City will not unreasonably withhold any consent or approval required by any City ordinance, code, regulation or any other governmental approval required by law...provided that nothing is construed to obligate the City to grant municipal permits or approvals the City would not be obligated to grant absent the agreement. The City also agreed that it will not adopt or approve any ordinance, code, or regulation not in force and effect on the effective date of the agreement which would materially adversely affect the project and which would exclude or exempt other similarly situated properties or facilities within the City.

### 2.3 LANDSCAPE/VISUAL SCREENING PLAN

A landscape/visual screening plan was not initially developed for the project, as stands of native mature trees shield the Substation area from nearby residences and roadways as seen in Photos 1 to 3 taken August 27, 2005 and are still valid. The trees have grown substantially since that time.

KCP&L GMO proposes to implement a landscape plan including planted screening, to be developed with the assistance of the Missouri Department of Conservation and in compliance with applicable safety regulations. This is a special condition submitted with the previous application, and is restated here for completeness.



**Photo No. 1** - View from the site boundary (property line) looking south from the corner of 203<sup>rd</sup> St. and the substation access road.



**Photo No. 2** - View looking southwest from 203<sup>rd</sup> Street property line.

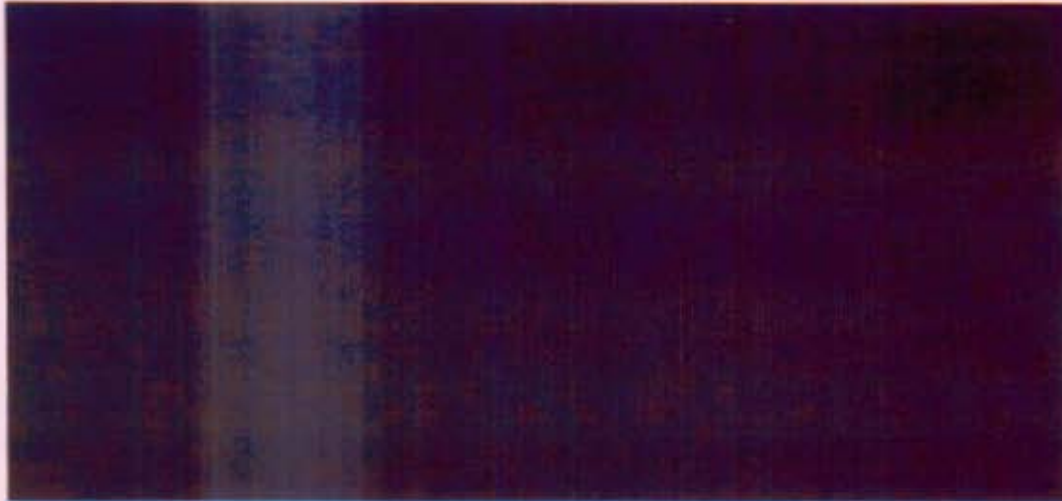


**Photo No. 3** - View from the site boundary (property line) looking south from within the existing transmission line easement from 203<sup>rd</sup> St.

## **2.4 FACILITY LIGHTING PLAN**

A lighting plan for the Substation was prepared, installed, and implemented. A combination of street-light type lighting and directional (shoe-box) lighting is currently being used at the Facility. Night-time photographs of the Substation were taken on August 31, 2005 (Photos Nos. 4 through 6) to demonstrate current lighting conditions at the Substation. The photos are still accurate.





**Photo No. 4** - View looking southwest toward the Substation from 203<sup>rd</sup> Street (just west of water tower and residence on south side of 203<sup>rd</sup> Street).



**Photo No. 5** - View from the site boundary looking south from 203<sup>rd</sup> Street, near entrance of Substation (just east of S. Knight Road).



**Photo No. 6** - View looking south to southeast from the entrance driveway, between the steel gate and Substation security fence line.

## **2.5 FACILITY SECURITY PLAN**

In addition to the lighting plan as described above, the Substation security features are listed below. The Substation is considered a constituent of several Homeland Security legal and regulatory requirements. Presidential decision directives, laws, regulations and other documents that provide requirements and guidance for the security plan are listed in Appendix E. KCP&L-GMO has implemented the following security measures:

### **2.5.1 Approach**

Vehicular access to the Substation is gained from 203<sup>rd</sup> Street.

- A 90-degree rule is in use; requiring vehicles to slow in order to complete the "right-angle" turn onto the Substation entrance driveway.
- The entrance driveway off of 203<sup>rd</sup> Street contains a locked security gate at 203<sup>rd</sup> Street, a locked steel pipe gate at the second crossing and a pass-code type gate in the chain link fence, which is a component of the security system.



### **2.5.2 Fencing**

A security fence, including barbed wire, surrounds the Substation and associated equipment. The security fencing is six (6) feet in height and contains an 18-inch outrigger consisting of three (3) strands of barbed wire extending at 45-degree angle from the top of the fence. The fence includes a motion detection system which is remotely monitored by KCP&L security, as is the rest of the Substation. The fence is chain-link design constructed of nine (9) gauge steel and supported by a top and bottom support bar for stability. Manual swing gates are secured with Pioneer Latch equipment. The fence complies with the requirements of Section 400-304 (B) (7).

As mentioned above, the security gate is equipped with a pass-code. Procedures for trespassing, unlawful entry, etc. were developed for construction and were revised once full operation of the Substation began.

A steel bar type gate has also been installed along the entrance driveway, approximately half way between 203<sup>rd</sup> Street and the perimeter security fence line. This gate remains locked unless access is necessary for appropriate Substation personnel.

### **2.5.3 Surveillance Cameras**

Surveillance cameras are installed at the site. Locations and design of the cameras must remain confidential.

### **2.5.4 Clear Zone**

In addition to the approach, fencing and current lighting, the existing clear zone (no substantial vegetation, except grasses) is maintained along the perimeter fence. The clear zone allows for increased visibility near the fence and reduces the potential for undetected intrusion into the Substation.

### **2.5.5 Security Signage**

Signs stating, "Danger High-Voltage" are placed every 50 feet along the perimeter fence. "No Trespassing" and "Private Property" signs are posted near the entrance of the Facility.



## **2.6 FACILITY SIGNAGE**

Besides signs used for safety and security purposes, KCP&L has installed an identification sign near the front entrance to the Substation. KCP&L believes all signs are in compliance with Article 9: Sign regulations of the new Zoning Regulations, as discussed in Section 5.0 below, and will comply with any positional signage requirements or request an appropriate variance or exemption.

## **2.7 TRAFFIC PLAN**

Since the Substation has limited access, construction and operation traffic require the use of 203<sup>rd</sup> Street which can be accessed by Old U.S. Highway 71 from either the Cities of Peculiar or Raymore. KCP&L does not believe that construction significantly impacted the normal flow of traffic in the area of the Substation. Since only a few employees occasionally visit the Substation during operation (estimated to be one or two times per month), the normal flow of traffic in the area should not be impacted.

All deliveries were and will be planned and managed in compliance with applicable MoDOT and County requirements. Any superloads (over-sized and/or heavy hauls) require a MoDOT permit, which requires a comprehensive structural analysis and road feasibility study of the proposed route. Any negative impact on local roads resulting from delivery of equipment will be addressed and repaired by KCP&L in compliance with applicable City of Peculiar and Mt. Pleasant Special Road District requirements. Road improvements, such as paving and patchwork have been performed once on 203<sup>rd</sup> Street, paid for by Aquila, at that time.

Dust control is not anticipated to be required since the Facility will not be visited on a frequent basis.



## 2.8 ROAD MAINTENANCE/REPAIR PLAN

Prior to starting construction, the proposed traffic route conditions were reviewed, photographed, and documented. Any damage caused by deliveries to the site during construction was promptly addressed.

- Aquila completed road improvements (repaving/patchwork) on 203<sup>rd</sup> Street.
- Permanent repairs were completed in compliance with Cass County Ordinance 02-01.

In response to recent inquiries, discussions were initiated with the Mt. Pleasant Special Road District (to be the future owners of and responsible for maintenance of the northern half of 203<sup>rd</sup> Street) and the City of Peculiar (owners of the southern half of 203<sup>rd</sup> Street) on the potential need for additional repairs or improvements to 203<sup>rd</sup> Street.

KCP&L GMO proposes to repair 203<sup>rd</sup> Street, from Peculiar Drive west to the driveway entrance to the substation, in accordance with specifications to be developed by the City of Peculiar and the Mt. Pleasant Township Special Road District. Such repairs shall be performed after the storm water management plan is implemented, subject to weather conditions. Once the repairs are performed and accepted by the City Engineer and the Mt. Pleasant Special Road District, KCP&L GMO's obligations under this condition shall cease. This is a special condition submitted with the previous application and is restated here for completeness.

Because there will be only occasional traffic for operation of the Substation, which constitutes one or two visits per month, no additional repairs are expected to be required after the anticipated ones are performed. KCP&L will contact the City of Peculiar's City Engineer and the Mt. Pleasant Special Road District if large deliveries and/or heavy haul traffic will be required in the future. While the Substation is laid out for expansion, such deliveries or heavy haul traffic are not anticipated to be required for some years based on normal load growth projections for the area.





## **3.0 COMPLIANCE WITH CHAPTER 400: ZONING REGULATIONS**

### **3.1 PROPOSED SPECIAL USE PERMIT**

#### **3.1.1 BASIS**

The Zoning Regulations do not appear to refer to electric substations, perhaps because none are located inside the City of Peculiar other than this recently annexed facility. Electric substations are not specifically listed as a permitted use in the Zoning Regulations, but "Public Facility, use or utility" is listed as permitted uses for District AG Agriculture (Section 400-410.1) and other districts, including District I-1 Light Industrial (Section 400-465.1) and District I-2 Heavy Industrial (Section 400-470.1). Because the property was zoned as Agricultural District (A) under Cass County zoning regulations at the time it was annexed into the City, it appears the Agricultural zoning designation can remain unchanged and the existing use of the property can be continued under that designation with the issuance of a Special Use Permit.

KCP&L GMO also requests an exception to the height restrictions for two lightning masts that are 101 feet tall. The basis for this request is provided in Section 3.5 of this Application.

#### **3.1.2 HEIGHT AND AREA REGULATIONS**

The Substation site complies with Section 400-410.3 -- Height and Area Regulations as follows:

- Height - limited to 35 feet or two and one-half stories in height. Some of the substation equipment exceeds this restriction, most notably two lightning masts which are 101 feet tall. The other equipment exceeding 35 feet in height are two 345 kV dead-end towers, two 161 kV dead-end towers, and two 161 kV bus supports on the 161 kV side of the transformer. Power poles on the site are assumed to not be constrained by this restriction. Refer to Section 3.5 below for an explanation of why the lightning masts and other equipment on the site qualify for a height exception.



## COMPLIANCE WITH CHAPTER 400 ZONING REGULATIONS

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- Front yards - Required to be "at least 30 feet." The actual setback is approximately 1786 feet per the Plat of Survey in Appendix A of this application.
- Side Yards - Required to be at least 15 feet on each side of a building. Actual setbacks are at least 261 feet, as determined from the substation fence.
- Rear Yards - Required to be at least 30 feet. The actual setback is 180 feet, as determined from the substation fence.
- Lot Area - Required to be at least 20 acres. The actual area is 55.05 acres.

### 3.2 PROTECTIVE BUFFER AND SCREEN REQUIREMENTS

Article 8, Section 400-800.7 appears to require a setback of at least ten feet for any building or parking lots along any property line abutting or adjoining a residential district. There is also a permanent screening requirement for commercial or industrial districts abutting or adjoining properties zoned for Dwelling House. To KCP&L's knowledge, no such district exists next to the site except possibly on the north side of 203<sup>rd</sup> Street in an area outside City limits (Grand Oaks Farms subdivision). The setback to the temporary gravel parking lot from the closest property line is several hundred feet per the Appendix A survey. Property to the east is agricultural, so it appears this requirement does not apply. Nevertheless, the site meets this requirement, taking into consideration proposed medium and low density residential areas defined in the proposed Future Land Use Map on the City's web site.

A landscape/visual screening plan was not initially developed for the project, as stands of native mature trees shield a large portion of the Substation area from nearby residences and roadways as depicted in Photo Nos. 1 through 3, provided in Section 2, that were taken August 27, 2005. The trees have grown substantially since that time. However, KCP&L GMO has committed to implement a landscape plan including planted screening, to be developed with the assistance of the Missouri Department of Conservation and in compliance with applicable safety regulations. This is a special condition submitted with the previous application, and is restated here for completeness.



### 3.3 NONCONFORMITIES

Article 10 provides for the regulation of nonconforming uses, buildings and structures.

- Section 400-1002.1 allows for ordinary repairs.
- Section 400-1002.2 provides for alterations and enlargements; subsection (B) of which appears not applicable once the requested special use permit is granted.
- Section 400-1002.3 refers to restoration of damaged non-conforming buildings or structures, which is also expected to be inapplicable if the requested special use permit is granted.
- Section 400-1002.4 on discontinuances of use appears inapplicable because the Substation, while unmanned, is not "vacant."
- Section 400-1002.5 on expansion of use, appears to be inapplicable if the requested special use permit is granted. In addition, this application provides for expansion (additional transformers) inside the Substation fence.
- Section 400-1003 on Non-conforming use of Conforming Building or Structures does not appear to apply if the requested special use permit is granted.
- Subsection 400-1004 on Non-conforming Use of Land does not appear to apply because the use of the property outside the substation fence is primarily agricultural in nature, which was the zoning of the property before it was annexed.

### 3.4 HEIGHT EXCEPTIONS

Section 400-301 contains a provision allowing for increased height above seventy-five feet (75'), provided that depth and width of yards is increased by one foot for each additional foot that such buildings exceed the height limit. The substation site contains two lightning masts that are 101 feet tall, which exceeds the 75 foot height restriction in Section 400.170 (B). Other equipment in the substation may exceed the 35 foot height restriction for District AG. All such equipment, including the lightning masts, are inside the Substation fence which has a distance of



## COMPLIANCE WITH CHAPTER 400 ZONING REGULATIONS

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180 feet to the rear property line (south side) and at least 261 feet to the sides, per the Plat of Survey in Appendix A. The equipment and lightning masts therefore easily meet the rules that allow for height above either 35 feet or 75 feet, in this case for a total height of 101 feet.

### 3.5 PARKING REGULATIONS

Temporary on-site gravel parking was provided during construction. A gravel parking lot was constructed and is associated with the system protection enclosure; and can accommodate 10-12 vehicles including line trucks, pickup trucks, and cars. It remains in place at the present time, but will be removed as part of implementation of the storm water management plan except for enough space to park two vehicles near the substation fence. Adequate space for parking also exists inside the substation fence, should it be needed. The present parking area is noted in the property survey drawing in Appendix A. Because the paving is gravel, striping for parking spaces is not provided but ample room for parking spaces of the required size is available.

Article 6, Section 400-608 - Off-Street Parking Requirements provides criteria for off-street parking and loading facilities in all districts. Section 400-608 (A) contains the criteria for a variety of businesses and uses; Section 400-608 (B) contains the requirements for loading spaces; Section 400-608 (C) addresses vehicle stacking requirements. None of the requirements appear to address an electric substation. The closest provision KCP&L GMO has identified is 400-608 (A) (16), which is a general provision for industrial establishments requiring adequate area to park all employees' and customers' vehicles at all times, adequate space for loading, unloading and storing all vehicles, but not less than one parking space for each employee or less than one parking space for each 1000 square feet of floor area, whichever is less.

The Substation is not staffed and is expected to have two site visits per month from KCP&L employees. With no permanent staff and only occasional site visits, the number of required parking spaces appears to be either zero or one. KCP&L GMO believes the facility site is and will be in compliance with the parking regulations.

Article 8, Section 400-800.1 (Parking Surfaces) requires parking areas, loading dock areas, entries from public roads and vehicular entries to buildings to be constructed of either concrete or asphalt, or other alternative surface as approved by the City Engineer. KCP&L GMO has



## COMPLIANCE WITH CHAPTER 400 ZONING REGULATIONS

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committed to chip and seal the access driveway on the 55-acre parcel, from 203<sup>rd</sup> Street to the substation fence, including any required parking area.

### **3.6 NOISE REGULATIONS**

Article 8, Section 400-801.3 - Performance Standards for Noise contains a table of maximum one-hour Leq (dB) requirements for receiving land use categories including residential. The most restrictive limit is a 55 dBA standard from 10:00 pm to 7:00 am adjacent to residential property. Compliance is discussed and documented in Section 7 of this SUP application.

### **3.7 OUTDOOR NIGHT TIME LIGHTING**

Article 8, Section 400-801.4 contains performance standards for outdoor night time lighting. As can be seen in Photos 4, 5, and 6 in Section 2.4 of this Application, night time lighting levels are extremely low. KCP&L GMO believes the Substation site lighting complies with the new City regulations.

### **3.8 REGULATIONS BELIEVED NOT APPLICABLE TO THIS FACILITY**

A review of the Chapter 400 identified regulations that KCP&L believes are not applicable to the facility. The regulations and the basis for that conclusion are provided below:

- Section 400.200 - Special Classes contains a list of specified uses that do not include electric substations.
- Article 3, Section 400-303 - Accessory Uses and Structures, Purpose. There are no accessory uses on this site, other than leasing of the property for agricultural purposes. The system protection enclosure on site is typical for high voltage substations, and would not be required on a site that is not a substation. KCP&L therefore believes this provision does not apply to this facility.
- Article 3, Section 400-305 - Setback Regulations when Adjacent to State Maintained Roads appears to refer to set-backs from highways and service roads. The property fronts



## COMPLIANCE WITH CHAPTER 400 ZONING REGULATIONS

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on 203<sup>rd</sup> Street, which is not a highway or service road, and is not maintained by the State.

- Article 4, Section 400-407 - Design Standards requires all uses shall be conducted entirely a fully enclosed building [sic] with no outdoor sales, storage, of display, unless otherwise allowed within this [Zoning] Code. Electric substations consist largely of outdoor equipment by their very nature, except for the enclosed system control building.
- Article 7 - Planned Unit Developments appears to be inapplicable to an existing electric utility substation.
- Article 8 - Supplemental Regulations contain a number of provisions that appear to be inapplicable to an electric substation. These include:
  - Section 400-800.2 - Exterior Building Surface Materials does not apply to the system protection enclosure because it is on property zoned AG Agricultural.
  - Section 400-800.3 - Trash Enclosures appears inapplicable to an unmanned system protection enclosure inside the substation fence.
  - Section 400-800.5 - Multiple Tenant Developments is inapplicable because there is no such development on this site.
  - Section 400-800.6 - Temporary Signs is inapplicable because there are no such signs on this site.
  - Section 400-800.7 - Setback Adjoining Residential District is inapplicable as discussed in Section 3.2 above.
  - Section 400-800.9 - Screening of Rooftop Mechanical Equipment is inapplicable because there is no such equipment on the site.
  - Section 400-801 - Environmental Performance Standards for Commercial and Industrial Uses may not apply for a special use permit on land zoned



## COMPLIANCE WITH CHAPTER 400 ZONING REGULATIONS

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Agricultural. Nevertheless, compliance or inapplicability of specific subsections of this provision is discussed below and in Sections 3.6 and 3.7, above.

- Section 400-801.5 - Performance Standards for Heat are inapplicable because the Substation is not an "operation producing intense heat."
- Section 400-801.6 - Performance Standards for Air Pollution because electric substations by their nature do not have the emissions characteristics noted in the regulation.
- Section 400-803 - Group Homes is inapplicable because no homes are on the property.
- Section 400-804 - Telecommunications Facilities is inapplicable because there is no communications tower on the site.
- Section 400-805 - Safe Rooms should not apply to an unmanned facility.
- Section 400-806 - Accessory Utility Facilities is inapplicable because the substation is "primarily for transmission or distribution to other locations" and is therefore outside the definition of Accessory Utility Facilities.
- Section 400-809 - Sump Pump Discharges does not apply because there are no sump pumps on the property.

In addition, Chapter 405 - Land Subdivision Regulations appears relevant to residential development but not the type of facility discussed in this application.



## **4.0 COMPLIANCE WITH CHAPTER 410: FLOOD HAZARD CONTROL**

Article 8, Section 400-807 of the new Zoning Regulations, states that "[a]ll development with the City of Peculiar shall conform to the Floodplain Management requirements in Chapter 410 of the Peculiar Municipal Code." A discussion of requirements and applicability of Chapter 410 is provided below.

### **4.1 LANDS TO WHICH CHAPTER 410 APPLIES**

Article II, Section 410.020 states that Chapter 410 applies to land within City jurisdiction, identified as A Zones and AE Zones, on specified FEMA Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) panels. The FEMA FIRM Maps provided with the Storm Water Management Plan in Appendix H show all of the Substation property is in Zone X and therefore outside a flood hazard area. It appears that the requirements of this Chapter are therefore not applicable.

### **4.2 FLOODPLAIN DEVELOPMENT PERMIT**

Article III, Section 410.080 requires a floodplain development permit for all proposed construction or other development in areas described in Article II, Section 410.020. As described in Section 4.1 above, none of the site is within Zones A and AE so no such permit from the City should be required.

Because this application is for a completed facility, which was in Cass County during construction and for which county building permits were obtained, KCP&L GMO believes that no additional permits are required under this section of the regulations. If any such permits are required in the future, KCP&L GMO will comply.

### **4.3 REGULATIONS BELIEVED NOT APPLICABLE TO THIS FACILITY**

A review of Chapter 410 identified specific regulations that KCP&L GMO believes are not applicable to the facility, in addition to the inapplicability of the Chapter as explained in Section 4.1 above. The regulations and the basis for that conclusion are provided below:





## COMPLIANCE WITH CHAPTER 410 FLOOD HAZARD CONTROL

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- Section 410.120: General Standards. Subsection A applies the scope of this section to areas within any numbered or unnumbered A Zones or AE Zones, which are not shown as being on the Substation site.
- Section 410.130: Specific Standards. These apply only to areas in Zones A and AE, which are not shown as being on the Substation site.
- Section 410.140: Manufactured Homes. There are no manufactured homes on this site.
- Section 410.150: Floodway. There is no floodway on this site.
- Section 400.160: Recreational Vehicles. There are no such vehicles on this site.
- Section 410.220: Conditions for Approving Variances for Agricultural Structures. There are no such structures on this site.
- Section 410.230: Conditions for Approving Variances for Accessory Structures. There are no such structures on this site.

### 4.4 STORM WATER MANAGEMENT PLAN

Sega, Inc., an engineering firm located in Stilwell, Kansas, has prepared a storm water management plan for the site. The proposed plan is provided in Appendix H and was submitted with the previous application. KCP&L GMO is committed to implement the plan and has submitted it to the City Engineer for review and approval. A building permit has also been requested to implement the plan.

As can be seen from the topographic map provided with the plan, the substation equipment inside the fence is on high ground and is exposed to little or no risk of flood damage. Transmission poles and foundations elsewhere on the property are designed to withstand flooding. Transmission conductor, by its elevated nature, is located to eliminate flood damage.

KCP&L GMO has agreed to the following special condition, restated here for completeness:



**COMPLIANCE WITH CHAPTER 410  
FLOOD HAZARD CONTROL**

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“The applicant shall implement a storm water management plan submitted with the rezoning application. Implementation will be to the satisfaction of the City Engineer and after consultation with a neighboring property owner (Bockelman).”

Consultation with Mr. Bockelman is under way at the present time.



## 5.0 COMPLIANCE WITH SIGN REGULATIONS

### 5.1 APPLICABLE REGULATIONS

Section 400-409 states "Signage for each use may be allowed as provided in Article 9." Article 9, Section 400-901 (C) states that this Article [9] provides "...minimum standards...by regulating the size, height, construction, location, electrification, operation of all signs and sign structures *exposed to public view within the City [italics added]*." KCP&L GMO does not know if these provisions apply to signs that were already installed on property when it was annexed into the City. Out of an abundance of caution, Section 5.0 is provided to explain how the existing signs meet Chapter 400, Article 9 of the City's Regulations.

### 5.2 SIGNS ON THE PROPERTY

There are various incidental, nameplate, non-commercial permanent signs on the property, all of which are non-illuminated (all as defined in Section 400-902 - Definitions). Most are legal notice, danger and warning signs not visible to the public from 203<sup>rd</sup> Street. KCP&L believes all signs on the site qualify for an exemption from requirements of Article 9, as explained in Section 5.4 below. The signs are described below:

- One sign on the front gate that reads "GPE and KCP&L prohibit weapons of any kind, including concealed firearms, on company property." The sign is 11 inches by 14 inches.
- One "Private Property No Trespassing Sign" located approximately 110 feet inside the front gate. The sign is 45 inches by 24 inches in size and is attached to a sign display steel structure that is 10 feet 9 inches high by 4 feet wide, with 80 inches of clearance under the sign mounting area.
- Two signs on the second gate which is approximately 900 feet inside the front gate. The first sign is 18 inches by 24 inches and reads "Authorized Personnel Only". The second is 14 inches by 20 inches and reads "Danger - High Voltage - Keep Out".



## COMPLIANCE WITH SIGN REGULATIONS

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- One KCP&L identification sign on the substation perimeter fence gate, over 1700 feet south of the site entrance gate. The sign also states the name of the facility and the street address (8901 East 203<sup>rd</sup> Street). The sign is 16 inches by 24 inches.
- One prohibition of weapons sign on the substation perimeter fence gate, as described above for the one on the gate at the entrance to the property.
- A "Danger - High Voltage - Keep Out" sign is located approximately every fifty feet on the substation perimeter fence. The signs are 14 inches by 20 inches. The approximate number of these signs on the perimeter fence is 45.

Photos of these signs are provided at the end of this Section 5.0.

### 5.3 SIGN PERMITS

Section 400-903 discusses when sign permits are required. This section does not appear to address existing signs on property when it is annexed into the City. As explained in Section 5.4 below, KCP&L believes all signs on the site qualify for an exemption.

### 5.4 EXEMPT SIGNS

Section 400-905 - Exempt Signs identifies signs for which Article 9 does not apply. The exemptions include:

- Section 400-905 (A) - "Signs which are not visible from any public right-of-way. " KCP&L believes this covers all signs on the substation perimeter fence (over 1700 feet south of the front entrance gate), and two signs on the second entrance gate (approximately 900 feet inside the front gate).
- Section 400-905 (G) - "Public signs, including informational, legal notices...and other warnings or emergency signs as are necessary to enforce City laws or control traffic." The weapons prohibition sign on the front gate is considered to be both a legal notice and informational sign, as is the "Private Property/No Trespassing" sign inside the front gate. The "Authorized Personnel Only" sign on the second gate is considered a warning sign to



## COMPLIANCE WITH SIGN REGULATIONS

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control traffic, as are all "Danger/High Voltage/Keep Out" signs on the second gate and on the substation perimeter fence.

### **5.5 PROHIBITED SIGNS**

Section 400-906 lists signs which are prohibited. KCP&L does not believe any of the signs on the Substation site fall within the definition of prohibited signs.

### **5.6 SIGNS PERMITTED IN THE AG DISTRICT**

Section 400-907 contains a table describing signs permitted in a district zoned agricultural. The substation site was zoned A Agricultural by Cass County before it was annexed by the City, so it is assumed this zoning designation will apply. The table includes an identification sign, one of which is located on the substation perimeter fence. The sign, over 1700 feet south of the site entrance, contains the facility street address and name of KCP&L. The sign is believed exempt from the regulations as described in Section 5.4 above. Information on the sign is needed for public safety and security reasons by any security or other personnel that may need to enter the facility.

Pictures of the signs were taken on August 7, 2008 and are provided below.



COMPLIANCE WITH SIGN  
REGULATIONS

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Photo No. 5-1: Weapons Prohibition Sign on Front Gate



Photo No. 5-2: "Private Property/No Trespassing" Sign Located Inside the Front Gate



COMPLIANCE WITH SIGN  
REGULATIONS

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Photo No. 5-3: "Authorized Personnel Only" sign on Second Gate



Photo No. 5-4: Danger/High Voltage Sign on Second Gate





COMPLIANCE WITH SIGN  
REGULATIONS

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Photo No. 5-5: KCP&L Identification Sign on Substation Perimeter Fence Gate



Photo No. 5-6: Weapons Prohibition and Danger/High Voltage Signs on Substation Perimeter Fence Gate. The "Danger" sign is mounted approx. every fifty feet on the perimeter fence.





## **6.0 OTHER PERMIT OR REGULATORY COMPLIANCE**

All permits, clearances and regulatory approvals, obtained by Aquila (now KCP&L GMO) for the Substation, are listed in Table 6-1 at the end of this Section 6.0.

### **6.1 PHASE I ENVIRONMENTAL SITE ASSESSMENT**

Prior to acquiring the property, Aquila contracted Aquaterra Environmental Solutions, Inc. (Aquaterra) to conduct a Phase I Environmental Site Assessment (ESA) of the 55.05-acre property. The assessment indicated that there was no evidence of site contamination.

### **6.2 NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) LAND DISTURBANCE PERMIT**

As part of Section 402 of the Federal Clean Water Act (CWA), the State of Missouri is delegated by the United States Environmental Protection Agency (EPA) to administer the NPDES General Permit for construction activities that will disturb one (1) or more acres of land within the state. A Missouri State Operating Permit (General Permit No. MO-R101000) for storm water discharges is required in accordance with Missouri regulation 10 CSR 20-6.200. To comply with the Missouri Clean Water Law, Aquila submitted the appropriate application to MDNR and received a General Permit (No. MO-R106858, dated October 15, 2004 - see Appendix F) prior to initiating any earthmoving activities at the site.

The Permit requires a Storm Water Pollution Prevention Plan (SWPPP) be prepared prior to construction to ensure that appropriate best management practices (BMP's) will be implemented during construction to reduce water quality impacts caused by stormwater runoff from construction sites. The SWPPP also requires monitoring of the BMP's to ensure they are functioning properly. The SWPPP was prepared and retained on-site during construction. The proposed BMP's were implemented and monitored.



### **6.3 WETLAND DETERMINATION**

To determine if any wetlands were on-site and would be impacted by the project, Aquila hired Burns & McDonnell to conduct a wetland delineation of the entire property. The delineation identified three (3) wetlands and seven (7) streams, two (2) of which are intermittent. A Nationwide Permit 12 (NWP 12 - see Appendix E) was obtained from the U.S. Army Corps of Engineers (USACE), Regulatory Branch, since 0.11 acres of wetlands were impacted by the project. Mitigation was completed along the streams being impacted and included planting of native grasses and forbs. The NWP 12 is certified by the Missouri Department of Natural Resources (MDNR), which concludes that the NWP will not violate existing water quality standards provided Aquila complies with the conditions included with the NWP 12. Upon project completion, Aquila must sign, date, and send a "Compliance Certification" to the USACE. This was done in November 2005.

### **6.4 THREATENED AND ENDANGERED SPECIES REVIEW**

To determine if the project would impact any federal or state listed threatened or endangered (T&E) species or their respective habitat, Aquila contracted Aquaterra to consult with the Missouri Department of Conservation (MDC) and the US Fish and Wildlife Service (USFWS). The USFWS responded with a "no objection" (dated October 7, 2004 - see Appendix F), while the MDC concluded that no T&E species or respective habitat appears to exist for the site (dated October 14, 2004 - see Appendix F).

### **6.5 CULTURAL RESOURCES CLEARANCE**

To determine if the project would impact any cultural resources, Aquila contracted Aquaterra to conduct a cultural resources background investigation. The results were submitted to the Missouri State Historic Preservation Office (SHPO) for review. Upon review, SHPO provided a Cultural resource Assessment (dated October 5, 2004 - see Appendix F) stating that adequate documentation was provided and that they determined there will be "no historic properties affected" by the current project.



## **6.6 STRUCTURE HEIGHT NOTIFICATION**

Projects with relatively tall structures often require a Federal Aviation Administration (FAA) notification; Form 7460-1. Structures requiring notification are described in 14 Code of Federal Regulations (CFR), Part 77.13 Construction or alteration requiring notice. None of the structures at this Substation met the criteria/definition for requiring notice (memo dated August 31, 2005 - Appendix F); hence, Aquila did not prepare and submit a notification. The tallest structures are 101 feet above grade and the closest FAA regulated airport is the Hillside Airport (63K), approximately 7.5 miles to the northwest of the Facility; therefore structures of 101 feet do not require notice. This determination considered approximate elevations at the Facility (976 to 977 feet) and the airport (1,025 feet).

## **6.7 FLOOD PLAIN DETERMINATION**

Prior to developing the Facility, a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the site was reviewed to determine if the site or any part thereof was located in a flood plain. According to FEMA FIRM Map No. 290783 0025C (dated May 4, 1992 - see Appendix F) for Cass County, Missouri the entire site is located in an area designated as Zone X, which is classified as being outside the 500-year flood plain. [Add updated 2006 map; no change in result]

## **6.8 BUILDING PERMITS**

A building permit (No. 25021 - Appendix F) was obtained from the County for the system protection enclosure located at the Substation. It was concluded through verbal correspondence with the County that a Grading Permit was not required.

## **6.9 ROAD AND BRIDGE DRIVEWAY PERMIT**

A road and bridge driveway permit was applied for through Cass County and was received on December 10, 2004 (see Appendix F). This allowed for construction of the Facility entrance driveway connecting to 203<sup>rd</sup> Street.



#### **6.10 CERTIFICATE OF CONVENIENCE AND NECESSITY**

During the 2008 session of the Missouri General Assembly, Senate Bill 720 was passed and subsequently signed into law by the Governor's office. The law authorizes the Missouri Public Service Commission (MPSC), through August 28, 2009, to grant permission and approval for the construction or acquisition of any electric plant located in a first class county without a charter form of government. It is our understanding the law applies to substations as well as power generating facilities (e.g., electric plant), and in particular the Peculiar 345 kV Substation.

KCP&L GMO believes that any controversy around the substation has been resolved along with the controversy concerning the South Harper Peaking Facility. However, out of an abundance of caution and the need for both facilities, KCP&L GMO has filed an application with the MPSC for a Certificate of Convenience and Necessity (CCN) for both facilities. The MPSC docket number is EA-2009-0118. A copy of the application has been provided to the City.



## **7.0 SOUND EMISSIONS**

### **7.1 NOISE STUDY**

The Substation is equipped with a low noise 345 - 161 kV transformer to minimize noise emissions from the site. To ensure compliance with the Cass County, Missouri Ordinance No. 02-20 - Noise Disturbance, the ordinance in effect at the time of construction, Aquila engaged Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to conduct a noise study. The county noise regulation (Ordinance 02-20) establish residential limits of 60 dBA during daytime operation (7:00 AM to 10:00 PM), and 55 dBA during nighttime operation (10:00 PM to 7:00 AM).

To determine actual sound levels during Substation operation, sound measurements were recorded at various locations at the Facility, which included both the security fence line and at the property boundary. All five (5) sound measurements at the property boundary were less than 55 dBA; ranging from 43.7 dBA to 52.0 dBA.

Study results indicate the Substation meets daytime (60 dBA) and nighttime (55 dBA) Cass County noise regulations for residential property at all measurement points along the Substation property boundary. For further details, see the Noise Study provided in Appendix G. The Substation therefore complies with Cass County Ordinance No. 02-20.

The new Zoning Regulations contain performance standards for noise. Article 8, Section 400-801.3 - Performance Standards for Noise contains a table of maximum one-hour Leq (dB) requirements for receiving land use categories including residential. The most restrictive limits are a 55 dBA standard from 10:00 pm to 7:00 am adjacent to residential property, and 65 dBA from 7:00 am to 10:00 pm. Compliance to the County 55 dBA standard is documented in the noise study in Appendix G, which covers the City requirements. In addition, Burns & McDonnell recently prepared a substation noise compliance letter which has been provided to the City and is included in Appendix G. The Substation therefore complies with the City noise requirements.



## 8.0 PUBLIC SUPPORT

From the beginning, this project has received substantial support from neighboring property owners. Many of these supporters have signed letters of support, which are included in Appendix I. Community outreach efforts during the planning of the project resulted in location of the substation on the south portion of the property at the request of Grand Oaks Farm residents. KCP&L believes that the outreach efforts and responsiveness to resident concerns resulted in a broad degree of public support or neutrality for the project as constructed.

One private lawsuit was filed by a couple residing on the west side of the substation site after the substation was constructed. KCP&L is pleased to report that a settlement has been reached with that party, and to our knowledge no other suits concerning the substation are filed or pending.

Public acceptance of the South Harper Peaking Facility and Peculiar 345 kV Substation, to the best of the Company's knowledge, has been achieved. The following metrics are offered for the City's consideration:

- A settlement has been negotiated and implemented with StopAquila.org.
- All private suits on the South Harper Peaking Facility and Peculiar 345 kV Substation have been settled
- A survey firm was hired to conduct a County telephone survey to determine public attitudes about the plant before additional community outreach efforts were undertaken in 2008. 601 households were surveyed, of which 72% were familiar with the plant
  - Of the 72%, 67% opposed removal and 13% had no opinion
  - 70% of the 72% questioned thought the power was needed.
- An informal County petition drive was organized in spring 2008, conducted by volunteers that were county residents but not Aquila employees. Residents were asked to sign a petition that opposed removal or dismantling of the power plant as a tremendous



waste of resources. In a brief period, 1002 signatures were collected of which 948 were determined to be county residents.

- 401 were from Pleasant Hill, home of two power plants
  - 139 were from Garden City
  - 131 were from Peculiar (a count that exceeds the membership of the principal opposition group)
  - 72 were from Harrisonville
  - 43 were from Freeman, and
  - The rest were from Raymore, Belton, Creighton, Cleveland, Archie, Lake Annette, Adrian, Drexel, East Lynne, Gunn City, Lake Winnebago, and Strasbourg.
- The Company held six information meetings around the county to brief the public on the status of the plant. Even with postcard mailings and newspaper ads, only 20 people came to hear the presentation and none were in opposition. A report on the community outreach effort is provided in Appendix I.
  - The Cass County Commission 3-0 voted on July 31, 2008 to approve the Company's special use permit application for the South Harper Peaking Facility. No one at that hearing expressed any opposition to the application.
  - The Company recently filed an application with the Missouri Public Service Commission for a certificate of convenience and necessity for both facilities. As of November 5, none of the parties to the case opposed the application.