BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

In the Matter of the Application of Aquila, Inc., for Permission and Approval and a Certificate of Public Convenience and Necessity Authorizing it to Acquire, Construct, Install, Own, Operate, Maintain, and otherwise Control and Manage Electrical Distribution Substation and Related Facilities in Kansas City, Jackson County, Missouri (Near the City of Raymore).	)	Case No. EA-2006-0499
In the Matter of the Application of Aquila, Inc., for Permission and Approval and a Certificate of Public Convenience and Necessity Authorizing it to Acquire, Construct, Install, Own, Operate, Maintain, and otherwise Control and Manage Electrical Distribution Substation and Related Facilities in St. Clair County, Missouri (Near the City of Osceola).	)	Case No. EA-2006-0500

STAFF'S LEGAL MEMORANDUM

COMES NOW the Staff of the Missouri Public Service Commission ("Staff") and for its memorandum addressing whether Aquila, Inc. ("Aquila") needs the authority it seeks in its applications in the above-captioned cases, which are not consolidated, states:

1. On June 28, 2006 the Commission issued orders in the above-captioned cases in which it, among other things, directed the Staff to file a memorandum in each addressing whether Aquila needs the certificates it seeks in each for substations, given the authority the Commission granted with the certificates the Commission issued in Case Nos. 9470 (1938) and 11,892 (1950). This memorandum is limited to addressing the foregoing.

2. In 1938 in Case No. 9470 the Commission granted Missouri Public Service Corporation, an Aquila predecessor, authorization to "construct, maintain and operate electric transmission lines and distribution systems over, along and across the highways of the counties of Jackson, Lafayette, Pettis, Johnson, Cass, Bates, Henry, Benton, St. Clair, Vernon, Cedar, Barton, Dade, Harrison, Mercer, Grundy and Daviess, and along such other routes as may be

properly provided in said counties, and along private rights-of-way as may be secured by the applicant, all in the State of Missouri, with authority to furnish electric service to all persons in the area for which this certificate is granted . . ."[1]

3. According to Aquila's verified application, the substation that is the subject of Case No. EA-2006-0499 is to be located in the City of Kansas City, Jackson County, Missouri, near the City of Raymore, Missouri. In Case No. 11,892 (1950) the authorization given in Case No. 9470 was transferred from Missouri Public Service Corporation to Missouri Public Service Company. Aquila has not provided the citations for the cases where the authorization was transferred to mense entities and, ultimately, to Aquila, Inc.

4. According to Aquila's verified application, the substation that is the subject of Case No. EA-2006-0500 is to be located in unincorporated St. Clair County, near the City of Osceola, Missouri.

5. As stated in "Appendix A," the affidavit of Staff engineer Daniel I. Beck attached hereto, the Staff has compared the proposed locations of the substations to the certificated area map referenced in Case No. 9470 that sets out the boundaries of the certificated areas, and the Staff believes the proposed locations of the substations lie within the certificated area.

6. Assuming Aquila holds the authority the Commission originally issued in Case No. 9470, based on the analysis set forth below and the information set forth in the attached affidavit marked "Appendix A," it is the Staff's view Aquila does not need the certificates it seeks in these cases, and that the Commission should so state and dismiss both cases. Second, and alternatively, the Staff suggests that, although the Staff believes Aquila does not need the certificates requested, the Commission could address the merits of the applications and determine Aquila does not need the certificates, but, if the applications are sufficient, grant the

[1] *In the Matter of the Application of Missouri Public Service Corporation*, 23 Mo.P.S.C. 740, 747-48 (Report and Order dated January 18, 1938 in Case No. 9470).

certificates anyway. Finally, the Staff points out that there is support for the view that Aquila needs the certificates it requests,[2] which the Staff addresses below. Also, no party either presently in this case or which has sought to intervene, has stated opposition to construction or operation of the proposed substations. Thus, unless the Office of the Public Counsel opposes either or both of the applications, if the Commission were to note the merits of the applications and grant certificates, the legal issue of whether Aquila already has the authority Aquila requires ultimately would likely be bypassed, unless some entity were to raise the issue in a request for rehearing and then in a petition for writ of review to obtain a judicial determination of the issue as was done in *State ex rel. Rex Deffenderfer Enterprises, Inc. v. Public Service Commission*, 776 S.W.2d 494 (Mo. App. 1989) regarding the necessity for a statutorily required hearing when no matter is in dispute.

7. The Staff notes Aquila has not alleged or supported in its application in Case No. EA-2006-0499 that it has a franchise from the City of Kansas City for the area where Aquila proposes to locate the substation near Raymore. Nonetheless, in Paragraph 12 of Aquila's application in Case No. EA-2006-0499 Aquila states: "Upon the city council of Kansas City's approval of the project, which the Company intends to seek, it will be an authorized land use. See, Kansas City Code of Ordinances, Chapter 80-41(2)(g)." In the same ordering paragraph in Case No. 9470 where the Commission granted Missouri Public Service Corporation its certificate, the Commission stated: "The authority herein granted, however, does not grant permission to serve within the corporate limits of any municipality unless the consent of the proper municipal authorities shall first have been obtained, and until a certificate of convenience and necessity for the operation in said municipal area shall have been secured from this Commission."[3] What the Commission intended by this statement is unclear. The Staff has

[2] *StopAquila.org v. Aquila, Inc.*, 180 S.W.3d 24 (Mo. App. 2005).
[3] *Id*. at 748.

found a 1964 case where the Missouri Supreme Court determined boundaries of Raytown Water Company within the City of Raytown based on roads designated in a franchise granted by Jackson County, Missouri in 1925, not on a franchise from the City of Raytown which incorporated in 1950 or a vague description of the 1925 ordering paragraphs of the Commission's 1925 Order granting Raytown Water Company its area certificate.[4]

7. Section 393.170, RSMo. provides:

> 1. No gas corporation, electrical corporation, water corporation or sewer corporation shall begin construction of a gas plant, electric plant, water system or sewer system without first having obtained the permission and approval of the commission.
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> 2. No such corporation shall exercise any right or privilege under any franchise hereafter granted, or under any franchise heretofore granted but not heretofore actually exercised, or the exercise of which shall have been suspended for more than one year, without first having obtained the permission and approval of the commission. Before such certificate shall be issued a certified copy of the charter of such corporation shall be filed in the office of the commission, together with a verified statement of the president and secretary of the corporation, showing that it has received the required consent of the proper municipal authorities.
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> 3. The commission shall have the power to grant the permission and approval herein specified whenever it shall after due hearing determine that such construction or such exercise of the right, privilege or franchise is necessary or convenient for the public service. The commission may by its order impose such condition or conditions as it may deem reasonable and necessary. Unless exercised within a period of two years from the grant thereof, authority conferred by such certificate of convenience and necessity issued by the commission shall be null and void.

The foregoing statute sets out two different certificates an electric utility may obtain from the Commission—a "line certificate" and an "area certificate," so called because line certificates typically were granted for the purpose of transmission of electricity to or between pockets, or areas, where the utility served end user customers and area certificates were granted to authorize, and require, service to customers in those pockets, or areas. In a case where the difference in the rights utilities were authorized to exercise through an area certificate (§ 393.170.2, RSMo.) and a

[4] *State ex rel. Public Water Supply District No. 2 of Jackson County v. Burton*, 379 S.W.2d 593 (Mo. 1964).

line certificate (§ 393.170.1, RSMo.) were at issue, *State ex rel. Union Electric Company v. Public Service Commission,* 770 S.W.2d 283 (Mo. App. 1989), the Western District Court of Appeals held the Commission had authority to require Union Electric Company to quit serving a traffic signal from a transmission line authorized by a line certificate on the complaint of Cuivre River Electric Service Company ("CRESCO"), after CRESCO had obtained both a franchise from the municipality and an area certificate from the Commission to provide electric service in an area that included the traffic signal. In describing an area certificate the Court stated, "This is the type of authority . . . which typically has been the principal vehicle for saturating a geographically defined area with retail electric service." The Court further stated, "In years past it was not uncommon for a utility like Union Electric to service communities by area certificate authority while holding line certificate of authority to build transmission lines connecting those towns like a series of pockets of retail service."

8. In an earlier case, *Harline v. Public Service Commission*, 343 S.W.2d 177 (Mo. App. 1960), [5] the Western District Court of Appeals framed the issue before it as follows:

> The basic issue for decision is: Must a public utility obtain an additional certificate of convenience and necessity from the Commission to construct each extension or addition to its existing transmission lines and facilities within a territory already allocated to it under a determination of public convenience and necessity?[6]

In its analysis the Court cited to the Commission's majority 1914 decision in *Complaint of Missouri Valley Realty Company v. Cupples Station, Light, Heat and Power Company and Phoenix Light, Heat and Power Company, UE, intervenor, Case No. 269,* 2 Mo.P.S.C. 1 (decided 10/12/1914), where the Commission concluded the statutory language now codified in § 393.170, RSMo., does not require a certificate for every extension of a utility's lines to render additional service. The Court stated the Commission had followed in that case the

[5] The utility involved in this case is Missouri Public Service Company.
[6] *Harline*, 343 S.W.2d at 180.

Commission's construction of the statute it had used for 46 years that line extensions within certificated areas did not require additional Commission certification.[7] The Court found the Commission's construction sound and upheld it. Not insignificantly, the appellants in *Harline* expressly argued a transmission line is an "electric plant" and, therefore, the utility was required to obtain an "area certificate."[8] Their argument did not persuade the Court. Additionally supportive of this interpretation of the statute is the Missouri Supreme Court's 1930 *en banc* opinion in *Public Service Commission v. Kansas City Power & Light Co.*, 31 S.W.2d 67, 325 Mo. 1217 (Mo. Banc 1930), where, in a case arising from alleged power line inductive electrical interference with telephone service, the Supreme Court stated[9]:

> Appellant relies on the case of *Missouri Valley Realty Co. et al*., 2 Public Service Commission Reports (Mo.) 1, in support of its contention that, where a utility is operating under authority from the commission, it may extend its lines without obtaining a certificate of convenience and necessity from the commission. The facts in that case were that the power company was lawfully authorized to operate its plant in the city of St. Louis. The question presented was whether or not the company could extend its lines within the limits of the city without authority from the commission so to do. In course of the report, the commission said: "The law is prospective in its operation and the defendants being engaged in business and serving the public with a plant already constructed when the law went into effect were not required to obtain a certificate of permission and approval from the Commission, and where the utility is legally serving the public, whether under a certificate from this Commission, or being exempt from that requirement, as in the case of defendants, we do not think the law requires such a certificate for every extension of its lines upon each street or alley where service may thereafter be desired. Consent of the municipality is always required as a condition precedent to the granting of a certificate of permission and approval by this Commission; but when a local board or officer is given authority by ordinance or franchise to control the location and placing of poles, conduits, wires, etc., on streets and alleys, and exercises such authority by granting a permit to the utility, the law does not contemplate that for every such permit a certificate shall be secured from this Commission."
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> We interpret the report as holding that the power company was lawfully authorized to operate its plant in the city of St. Louis and was not required to obtain additional certificates for extensions of its lines in the territory where it already had authority to operate. If this report should be construed as holding that

[7] *Harline*, 343 S.W.2d at 182.
[8] *Harline*, 343 S.W.2d at 183.
[9] 31 S.W.2d at 71; 325 Mo. at 1226-27.

> a public utility which is lawfully authorized to operate in a given territory may extend its operations beyond the limits of such territory without first obtaining authority from the commission so to do, it would not be good law and should not be followed.

9. Against cases such as these, the Court in *StopAquila.org v. Aquila, Inc*., 180 S.W.3d 24 (Mo. App. 2005), construed § 393.170, RSMo., as part of its analysis of whether Aquila was required to comply with Cass County zoning requirements when building a power plant and substation in unincorporated areas of Cass County. In that opinion the Court stated:

> The issue in this case does not involve a mere extension of transmission lines. Rather, Aquila is seeking to build an electric power plant, a matter that is governed by *section* ***393.170.1. . . .***
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> The terms "electric plant" and "transmission lines" are not synonymous under the Public Service Commission Law. While "electric plant" is defined to include "any conduits, ducts or other devices, materials, apparatus or property for containing, holding or carrying conductors used or to be used for the transmission of electricity for light, heat or power," *§ 386.020(14)*, "transmission line" is not defined. And under any reasonable definition, a transmission line does not generate electricity as an electric plant does. A transmission line is not a source of significant levels of noise, and it does not emit pollutants in the same way that a generating facility emits pollutants. Nor does a transmission line require the construction of roads and buildings or siting near fuel sources or water. The Commission's interpretation does not accord with the *plain language* of *section 393.170.1*, which does not contain an exemption for those utilities that are already authorized to operate in a particular service territory and wish to construct an electric plant. Moreover, *Harline* appropriately ruled that transmission line extensions do not need additional authorization from the Commission, because such authority already comes within the franchise granted by a county, and territorial authority is based on the franchise. Accordingly, the Commission has erroneously interpreted *Harline* by extending the court's reasoning in that case to a public utility's request for specific authority to build a power plant under *section 393.170.1* in territory already allocated to it.
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> * * * *
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> By requiring public utilities to seek Commission approval each time they begin to construct a power plant, the legislature ensures that a broad range of issues, including county zoning, can be considered in public hearings before the first spadeful of soil is disturbed. There is nothing in the law or logic that would support a contrary interpretation. Moreover, the county zoning statutes discussed above also give public utilities an exemption from county zoning regulations if they obtain the permission of a county commission, after hearing, for those

> improvements coming within the county's master plan. This strongly suggests that the legislature intended that a public hearing relating to the construction of each particular electric plant, take place in the months *before* construction begins, so that current conditions, concerns and issues, including zoning, can be considered, whether that hearing is conducted by the county or the Commission.
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> * * * *
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> We end where we began, with *section 393.170.1*, which, in plain and unambiguous language, provides "No gas corporation, electrical corporation, water corporation or sewer corporation shall begin construction of a gas plant, electric plant, water system or sewer system without first having obtained the permission and approval of the commission." Because *subsection 3* further imposes a finding of necessity and convenience "after due hearing" for "such construction," we believe that the legislature wanted the Commission to conduct hearings whenever new construction is proposed.
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> * * * *
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> The overriding public policy from the county's perspective is that it should have some authority over the placement of these facilities so that it can impose conditions on permits, franchises or rezoning for their construction, such as requiring a bond for the repair of roads damaged by heavy construction equipment or landscaping to preserve neighborhood aesthetics and provide a sound barrier. As the circuit court stated so eloquently, "to rule otherwise would give privately owned public utilities the unfettered power to be held unaccountable to anyone other than the Department of Natural Resources, the almighty dollar, or supply and demand regarding the location of power plants. . . . The Court simply does not believe that such unfettered power was intended by the legislature to be granted to public utilities."
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> For these reasons, we affirm the circuit court's judgment permanently enjoining Aquila from building the South Harper plant and Peculiar substation in violation of Cass County's zoning law without first obtaining approval from the county commission or the Public Service Commission. . . . .

10. While the holding in the *StopAquila.org* opinion includes enjoining construction of the Peculiar substation and the substation is mentioned in the Court's analysis in the opinion, the foregoing excerpts, which are representative, show the Court's analysis focused on the generation plant and not on the substation, which the Court essentially lumped with the generation plant. The attributes of generation plants and transmission lines the Court marshaled in distinguishing the two—transmission lines are not a source of significant levels of noise, do not emit pollutants in the same way that a generating facility emits pollutants, and do not require

the construction of roads and buildings or siting near fuel sources or water—can also be compared with substations. As indicated in the attached Staff affidavit, substations, like transmission lines, are not a source of significant levels of noise, do not emit pollutants in the same way that a generating facility emits pollutants, generally do not require the construction of roads, and do not require the construction of buildings or siting near fuel sources or water.

11. As stated by Staff engineer Beck in "Appendix A," controlling voltage levels to minimize transmission losses while serving customers at least cost and with greatest safety involves the use of substations to change voltages. In other words, substations are integral to transmission lines in a way that generation plants are not.

12. In *Union Electric Co*. cited above, the Court stated the following regarding franchises and the effect of Commission authorization:

> Utility franchises are no more than local permission to use the public roads and right of ways in a manner not available to or exercised by the ordinary citizen. The granting authority does not gain a right to dictate the level of utility business activity nor may it purport to grant an exclusive franchise. *State ex inf. Chaney v. West Missouri Power Company*, 313 Mo. 283, 281 S.W. 709 (1926), (Mo. Constitution Art. 3, s 40(28); Article 1, s 13).
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> The statutory scheme at Section 393.170.2, RSMo 1986 establishes two layers of oversight by providing that the rights and privileges granted by a franchise may not be exercised without first having obtained Commission approval. A Commission certificate becomes an additional condition imposed by the State on the exercise of a privilege which a municipality or county may give or refuse under its delegated police power. *State ex rel. City of Sikeston v. Public Service Commission of Missouri*, 336 Mo. 985, 82 S.W.2d 105, 108-09 (1935).[10]

13. The foregoing instructs that a Commission certificate is an additional condition imposed by the state, not a grant of power, *i.e*., both line and area certificates enable a utility to exercise powers they already have, neither confers the powers. Further, it instructs that a franchise is no more than local permission to use public roads and right-of-way in a manner the general public cannot. Therefore, because the need for a certificate from the Commission is

independent of authority obtained by a franchise, the logic of the following statement by the Court in its *StopAquila.org* opinion is faulty: "Moreover, *Harline* appropriately ruled that transmission line extensions do not need additional authorization from the Commission, because such authority already comes within the franchise granted by a county, and territorial authority is based on the franchise."

14. Based on the foregoing facts and law, the Staff believes the 1938 certificate (Case No. 9470), if the Commission ultimately transferred that authority to Aquila, gives Aquila all the authority it requires from this Commission to construct the substations in question in these applications.

15. As addressed with more detail in "Appendix A," the Staff has concerns with the resources the utilities, the Commission, the Staff and others may have to expend in cases where applications for certificates to construct substations are before the Commission. If those certificates are not necessary, expending resources on such cases would be wasteful and otherwise very costly.

While it appears it might not substantially increase the work the parties in these cases will need to perform for Commission Orders that might lead to grants of line certificates for these substations, in light of the foregoing concerns, the Staff's primary recommendation is that the Commission opine no additional certificates are required and dismiss both cases. If Aquila or another party is discomforted by dismissal, it may seek Court review where, unlike a Commission Order, a Court decision would establish precedent of a binding or more binding nature.

16. Second, and alternatively, the Staff recommends the Commission express the view line certificates are not necessary for these substations, but, for the benefit of Aquila in

[10] *State ex rel. Union Electric Company,* 770 S.W.2d at 285-86; see also *State ex inf. Shartel, ex rel. City of Sikeston v. Missouri Utilities Co.,* 53 S.W.2d 394, 331 Mo. 337, (Mo. banc 1932).

going forward with installation of the substations, consider the substantive merits of its applications and, if they are sufficient, grant the certificates anyway.

17. Finally, the Staff points out that the Commission could rely on the Court's treatment of the Peculiar substation in the *StopAquila.org* opinion and consider the applications in the instant cases as line certificate applications under subsection one of § 393.170, RSMo., and move forward with processing them. In doing so, as previously noted the legal issue of whether Aquila already has the authority Aquila requires ultimately would likely be bypassed, unless some entity were to raise the issue in a request for rehearing and then in a petition for writ of review to obtain a judicial determination of the issue as was done in the *Deffenderfer Enterprises* case with the statutorily required hearing issue. The *StopAquila.org* opinion approach is not the Staff's preferred option and there is legal basis for not taking this approach.

18. The Staff also notes the Commission's May 23, 2006 Report and Order in Case No. EA-2006-0309 regarding line certificates for Aquila's South Harper generating facility and Peculiar substation, the majority of the Commission stated the following at page 27 of the Report and Order:

> The Commission does not conclude that Aquila requires an additional certificate of convenience and necessity for its Peculiar Substation. A utility holding an area certificate may build transmission facilities within its certificated area without having to obtain a line certificate. Nevertheless, Aquila has requested a line certificate for its Peculiar Substation, and the Commission concludes that no harm will be caused if the Commission grants a line certificate for the substation. Further, acting on Aquila's request for a certificate of convenience and necessity for its Peculiar Substation may lead to a quicker final resolution of questions of the legality of that facility. (Footnote omitted.)

Therefore, at least a majority of the Commission has not firmly committed to a position on whether substations require line certificates.

WHEREFORE, as directed by the Commission, the Staff submits this memorandum in which it first primarily recommends the Commission determine Aquila does not need the certificates it seeks and dismiss the cases; second, recommends the Commission determine

Aquila does not need the certificates it seeks, but alternatively grant the certificates if the applications are sufficient; and, finally, points out that although there is support in the *StopAquila.org* opinion for the view that Aquila needs the certificates it seeks, this approach is not the preferred Staff option and there is legal basis for not selecting this option.

Respectfully submitted,

/s/ Nathan Williams
Nathan Williams
Deputy General Counsel
Missouri Bar No. 35512

Attorney for the Staff of the
Missouri Public Service Commission
P. O. Box 360
Jefferson City, MO 65102
(573) 751-8702 (Telephone)
(573) 751-9285 (Fax)
nathan.williams@psc.mo.gov

Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or emailed to all counsel of record this 21st day of July 2006.

/s/ Nathan Williams

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AFFIDAVIT OF DANIEL I. BECK

On June 28, 2006, the Commission issued Orders in both Case Nos. EA-2006-0499 and EA-2006-0500 directing its Staff to file memoranda by July 18, 2006, addressing whether Aquila needs the Certificates of Convenience and Necessity it seeks in each case. In its verified application in Case No. EA-2006-0499 Aquila requests the Commission grant it a certificate of convenience and necessity to build what it describes as a distribution substation named the "Raymore North Substation." Aquila states this substation is to be located north of Raymore in Jackson County, Missouri, and will reduce line voltage from 161KV to 12KV.

In its verified application in Case No. EA-2006-0500 Aquila requests the Commission grant it a certificate of convenience and necessity for what it describes as a transmission substation named the "Osceola Substation." Aquila states this substation is to be located in St. Clair County just east of Osceola, Missouri, and will reduce line voltage from 161KV to 34.5KV.

Based on the verified application, the Staff attempted to review the service map from Case No. 9470; however, that map could not be located. Instead, the Staff reviewed its own internal maps and Aquila's tariffs. Based on that review, all indications are that these two sites are in Aquila's service area.

The Staff's ultimate recommendation to the Commission is that Aquila's existing certificates of convenience and necessity are sufficient. This recommendation is based on a mixture of law and fact. The purpose of this affidavit is to set forth the facts upon which the Staff's recommendation is based.

In constructing a system for generating electricity and distributing it to end users a utility must first generate, or purchase, the electricity. Much of the design of an electrical utility's system is driven by the need to minimize energy losses incurred when electricity flows from one place to another. Energy loss per unit of distance is less when electricity flows at higher voltages, all other things being equal. Generally, when larger amounts of electrical energy are moving over larger distances voltages are kept higher (tens to hundreds of thousands of volts), as the flow of energy lessens and the distances decrease, the voltages are also reduced to the point where they are usable by end users (for typical residential customers, hundred(s) of volts).

A tree provides a workable analogy. The number of voltage changes (and associated branches) discussed is merely illustrative. The size of the trunk, branches and twigs can be loosely correlated to the size of electric lines (transmission and distribution). Electricity from a generation plant (say near the base of a trunk) flows up the trunk to main branches, then to smaller branches, then to twigs where it is consumed by end users.

Typically, immediately adjoining the generating unit of the generation plant the voltage is increased into the tens to hundreds of thousands of volts range. It then flows through the high voltage transmission lines (the trunk) until it is appropriate to reduce the voltage (the equivalent of a main branch). As electricity flows from main branches to smaller branches the voltage is further reduced. As electricity flows from smaller branches to twigs the voltage is reduced again. Ultimately, the voltage is reduced to the level where it is used by residential end users.

At each point where the voltage changes there is one or more transformers that effect the change in voltage. The higher the voltages at which the transformer works the larger and more expensive it is. Distribution transformers small enough to attach to poles are found in residential neighborhoods. Larger transformers, both transmission and distribution, are located at substations which typically also include switching capabilities so that particular areas receiving electricity can be de-energized, for reasons of safety and service reliability. Generally, the higher the voltages of the substation the larger the footprint of the substation and the greater its height.

Based on the information in Aquila's application, the Staff would categorize the "Osceola Substation" as a "bulk substation." Bulk substations are typically used to decrease voltage levels from transmission levels to either the lower transmission levels or the higher distribution levels, but not to the point where they would be used by many end users. In the above tree analogy above they might be located where main branches split into smaller branches.

Based on the information in Aquila's application, the Staff would categorize the "Raymore North Substation" as a "distribution substation." Typically "distribution substations" decrease the voltage to the level from which it is again dropped (typically by pole transformers) to the level most residential end users use—typically about 120 volts per line.

While generation plants must be located near fuel sources, often water (for cooling) and where electricity can economically be put onto high voltage transmission lines, the criteria for locating substations is based on considerations such as expected and actual growth in end users, safety, line costs (the line voltage rating generally being directly related to its cost), the relative costs of transformers (the higher the voltage generally being directly related to its cost) and land use restrictions.

Like the Court in *StopAquila.org* said about transmission lines, substations do not generate electricity as an electric plant does. Substations are not sources of significant levels of noise and do not emit pollutants as generating plants do. Substations do not necessarily require the construction of roads, and they do not require the construction of buildings or siting near fuel sources or water.

Another analogy can be drawn from a common child's toy, tinker toys. Tinker toys use sticks and spools to make objects. An electric line can be compared to the stick and a substation can be compared to the spool. Just as two sticks cannot be joined together without a spool; two electric lines of different voltages cannot be joined without a substation. Therefore, allowing electric utilities to install transmission and distribution lines accomplishes nothing without the substations and transformers that join the lines together.

The Commission's Report and Order in Case No. EA-2006-0309 included the flowing language: "The Commission does not conclude that Aquila requires an additional certificate of convenience and necessity for its Peculiar Substation." However, the Commission also determined that no harm will be caused if the Peculiar Substation was granted a certificate as part of that proceeding. While that was true for that proceeding, I believe that granting a certificate in the two proceedings that are the subject of this affidavit could result in harm if it then follows that all new substations that are constructed by the four investor-owned electric utilities (IOUs) require a separate CCN. Such a procedure would add a burdensome process that I do not believe would provide any practical value that was not already provided by CCNs for specific service areas.

Although the siting of a power plant is a significant issue that the courts have decided require the effort that was expended in Case No. EA-2006-0309, it does not seem logical to expend that much effort (or even a fraction of that effort) to certificate a substation when the electric lines coming into and going out of the substation are certificated by an earlier area certificate and when substations are integral with transmission lines in delivering electricity to end users and are essentially as dissimilar to generating plants as are transmission lines. Although it is impossible to forecast the number of CCNs that might be requested in a given year, since Aquila accounts for approximately 14% of the electricity and Aquila filed two substation CCNs this calendar year, the math would suggest 14 substation CCN requests per year.

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AFFIDAVIT OF DANIEL I. BECK

STATE OF MISSOURI)
)ss
COUNTY OF COLE)

Daniel I. Beck, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Staff memorandum, and that the facts therein are true and correct to the best of his knowledge and belief.

Daniel I. Beck

Subscribed and affirmed before me this 21st day of July, 2006. I am commissioned as a notary public within the County of Cole, State of Missouri, and my commission expires on June 9, 2009.

ROSEMARIE RIEDL
MY COMMISSION EXPIRES June 1, 2009
NOTARY SEAL
#05509538
COLE COUNTY
NOTARY PUBLIC, STATE OF MISSOURI

NOTARY PUBLIC