



**Robin Carnahan**  
**Secretary of State**

**Administrative Rules Division**  
**Rulemaking Transmittal Receipt**

Rule ID: 8041  
 Date Printed: 12/14/2007  
 Rule Number: 4 CSR 240-23.020  
 Rulemaking Type: Proposed Rule  
 Date Submitted to Administrative Rules Division: 12/14/2007  
 Date Submitted to Joint Committee on Administrative Rules: 12/14/2007

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Name of Person to Contact with questions concerning this rule:

Content: Cully Dale	Phone: 751-4255	Email: <a href="mailto:cully.dale@psc.mo.gov">cully.dale@psc.mo.gov</a>	Fax:
RuleDataEntry:	Phone:	Email:	Fax:

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Included with Rulemaking:

Cover Letter	12/14/2007
Public Fiscal Note	12/14/2007
Private Fiscal Note	12/14/2007
Affidavit for public cost	12/14/2007

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Secretary of State  
Administrative Rules Division

**RULE TRANSMITTAL**

Administrative Rules Stamp

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SECRETARY OF STATE  
ADMINISTRATIVE RULES

Rule Number 4 CSR 240-23.020

Use a "SEPARATE" rule transmittal sheet for EACH individual rulemaking.

Name of person to call with questions about this rule:

Content Cully Dale Phone 573-751-4255 FAX \_\_\_\_\_

Email address cully.dale@psc.mo.gov

Data Entry same Phone \_\_\_\_\_ FAX \_\_\_\_\_

Email address \_\_\_\_\_

Interagency mailing address Public Service Comm'n, 9<sup>th</sup> Floor, Governor Office Bldg, JC

TYPE OF RULEMAKING ACTION TO BE TAKEN

- Emergency rulemaking, include effective date  
 Proposed Rulemaking  
 Withdrawal     Rule Action Notice     In Addition     Rule Under Consideration  
 Order of Rulemaking

Effective Date for the Order \_\_\_\_\_

Statutory 30 days OR Specific date \_\_\_\_\_

Does the Order of Rulemaking contain changes to the rule text?  NO

YES—LIST THE SECTIONS WITH CHANGES, including any deleted rule text:

Small Business Regulatory  
Fairness Board (DED) Stamp

JCAR Stamp

**JOINT COMMITTEE ON**  
DEC 14 2007  
**ADMINISTRATIVE RULES**



Commissioners

JEFF DAVIS  
Chairman

CONNIE MURRAY

TERRY JARRETT

ROBERT M. CLAYTON III

LINWARD "LIN" APPLING

## Missouri Public Service Commission

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JEFFERSON CITY MISSOURI 65102  
573-751-3234  
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<http://www.psc.mo.gov>

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Executive Director

DANA K. JOYCE  
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ROBERT SCHALLENBERG  
Director, Utility Services

NATELLE DIETRICH  
Director, Utility Operations

COLLEEN M. DALE  
Secretary/Chief Regulatory Law Judge

KEVIN A. THOMPSON  
General Counsel

December 14, 2007

Honorable Robin Carnahan  
Secretary of State  
Administrative Rules Division  
600 West Main Street  
Jefferson City, Missouri 65101

Dear Secretary Carnahan:

**Re: Proposed Amendment to 4 CSR 240-23.020**

### CERTIFICATION OF ADMINISTRATIVE RULE

I do hereby certify that the attached is an accurate and complete copy of the proposed amendment lawfully submitted by the Missouri Public Service Commission for filing on this 14<sup>th</sup> day of December, 2007.

Statutory Authority: Sections 386.210.2 and 386.250 RSMo 2000.

Executive Order 93-13 requires state agencies to undertake a "takings analysis" of each proposed rulemaking in light of the United States Supreme court decision in *Lucas v. South Carolina Coastal Council*, 112 S. Ct. 2886 (1992). Pursuant to that order, I have undertaken a "takings analysis" of the above-referenced proposed rulemaking. In *Lucas*, the Court held that state regulation depriving an owner of real property of all economically beneficial use of that property constitutes a "taking" under the Fifth and Fourteenth Amendments of the U.S. Constitution, for which the property owner must be compensated. Adopting the proposed rulemaking does not implicate the takings clause of the U.S. Constitution, because the proposed rulemaking does not involve the taking of real property.

Section 536.300, RSMo Supp. 2006, requires state agencies to "determine whether the proposed rule amendments affect small businesses and, if so, the availability and practicability of less-restrictive alternatives that could be implemented to achieve the same results of the proposed rulemaking." Executive Order 03-15, which similarly addresses the impacts of rulemakings on small businesses, defines a small business to be "a for-profit enterprise consisting of fewer than one hundred full- or part-time employees" and elaborates

that a proposed rule "affects" a small business if it "impose[s] any potential or actual requirement" that "will cause direct and significant economic burden upon a small business, or that is directly related to the formation, operation, or expansion of a small business." Section 536.300.3, RSMo Supp. 2006, in part, provides: "If the state agency determines that its proposed rule does not affect small business, the state agency shall so certify this finding in the transmittal letter to the secretary of state, stating that it has determined that such proposed rule will not have an economic impact on small business . . ."

Proposed amendments to 4 CSR 240-23.020 do not impose requirements that have an economic impact on small businesses, that "will cause direct and significant economic burden upon a small business, or that is directly related to the formation, operation, or expansion of a small business." The Commission certifies that it has determined that the proposed rule will not have an economic impact on small businesses.

If there are any questions, please contact: Colleen M. Dale, Secretary  
Missouri Public Service Commission  
200 Madison Street  
P.O. Box 360  
Jefferson City, MO 65102  
(573) 751-4255  
cully.dale@psc.mo.gov

BY THE COMMISSION



Colleen M. Dale  
Secretary

Title 4 – DEPARTMENT OF ECONOMIC DEVELOPMENT  
Division 240 – Public Service Commission  
Chapter 23 – Electric Utility Operational Standards

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SECRETARY OF STATE  
ADMINISTRATIVE RULES

PROPOSED RULE

4 CSR 240-23.020 Electrical Corporation Infrastructure Standards.

*PURPOSE: This rule establishes the minimum requirements for the transmission and distribution facilities of electrical corporations as defined in section 386.020(15), RSMo Supp. 2006 regarding inspection (including maximum allowable inspection cycle lengths), condition rating, scheduling and performance of corrective action, record keeping, and reporting, in order to provide safe and adequate electrical service. These requirements shall be based on factors such as applicable industry codes, national electric industry practices, manufacturer's recommendations, sound engineering judgment and past experience.*

(1) Applicability. This rule applies to all electrical corporations as defined in section 386.020(15), RSMo Supp. 2006.

(2) Definitions. For the purpose of this rule:

(A) Corrective action means maintenance, repair, or replacement of electrical corporation equipment and structures so that they function properly and safely. Temporary interruption of service or remedial action is appropriate until corrective action can be completed;

(B) Detailed inspection means an inspection where individual pieces of equipment and structures are carefully examined, visually and through use of routine diagnostic testing, as appropriate, and (if practicable and if useful information can be so gathered) opened, and the condition of each rated and recorded;

(C) Intrusive inspection means an inspection involving movement of soil, taking samples for analysis, and/or using more sophisticated diagnostic tools beyond visual inspections or instrument reading;

(D) Operating area means a geographical subdivision of each electrical corporation's franchise territory as defined by the electrical corporation. These areas may also be referred to as regions, divisions or districts;

(E) Patrol means a simple visual inspection, of applicable electrical corporation equipment and structures, which is designed to identify obvious structural problems and hazards. Patrols may be carried out in the course of other electrical corporation business;

(F) Remedial Action means action taken immediately or as soon as possible to eliminate an imminent hazard to person or property. Remedial action may be temporary, pending final corrective action. Remedial action may include the temporary interruption of service;

(G) Rural means those areas where there are fewer than thirty-five (35) customers per circuit mile;

(H) Underground Network means an electrical distribution system typically located in manholes, vaults, tunnels, and other underground structures; and

JOINT COMMITTEE ON  
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ADMINISTRATIVE RULES

(I) Urban means those areas where there are thirty-five (35) or more customers per circuit mile.

(3) Standards for Inspection, Record Keeping, and Reporting.

(A) Each electrical corporation subject to this rule shall have personnel sufficiently trained in inspections conduct inspections of its transmission and distribution facilities operated above six hundred (600) volts, as necessary to provide safe and adequate service pursuant to section 393.130.1, RSMo Supp. 2006, but in no case may the period between inspections (measured in years) exceed the time specified in the table, included herein, titled "Electrical Corporation System Inspection Cycles (Maximum Intervals in Years)."

(B) Each electrical corporation subject to this rule shall file at the commission by no later than July 1, 2008, compliance plans for the inspections and record keeping required by this rule, with verification by affidavit of an officer who has knowledge of the matters stated therein. These compliance plans shall include the proposed forms and formats for annual reports and source records, as well as the electrical corporation's plans for the types of inspections and equipment to be inspected during July 1 through December 31, 2008 and the coming calendar year. The electrical corporation's compliance plans shall include a projected schedule for completing a full cycle for each infrastructure classification shown in the attached table titled "Electrical Corporation System Inspection Cycles (Maximum Intervals in Years)." The commission may prescribe changes to an individual electric corporation's obligations relating to reporting and record keeping formats and forms when and as necessary. None of these changes may conflict with the requirements of this rule unless specifically approved by the commission through a variance.

(C) Each electrical corporation subject to this rule shall file with the commission an annual report detailing its compliance with this rule during the prior calendar year, with verification by affidavit of an officer who has knowledge of the matters stated therein. The first report required under this section shall be filed with the commission by no later than July 1, 2009 and will cover calendar year 2008. Each electrical corporation shall file subsequent annual reports for every following year by no later than July 1 covering the prior calendar year. The report shall identify the number of facilities, by type, which have been inspected during the previous reporting period. It shall identify those facilities that were scheduled for inspection but that were not inspected according to schedule and shall explain why the inspections were not conducted, and provide the electrical corporation's recovery plan to perform the required inspections. The report shall also present the total number and percentage breakdown of equipment rated at each condition rating level, including that equipment determined to be in need of corrective action. Where corrective action was scheduled during the reporting period, the report shall present the total number and percentage of equipment that was or was not corrected during the reporting period. For those instances in which equipment was scheduled to have corrective action but the equipment was not corrected during the reporting period, an explanation shall be provided, including a date certain by which required corrective action will occur. The report shall also present totals and the percentage of equipment in need of corrective action, but with a scheduled date beyond the reporting period, classified by the amount of time remaining before the scheduled action. All of the above

information shall be presented for each type of facility identified in the table, included herein, titled "Electrical Corporation System Inspection Cycles (Maximum Intervals in Years)." If periodic reporting of infrastructure inspection results is required by another governmental entity, those reports shall also be filed at the commission.

(D) The electrical corporation shall maintain records of inspection activities which shall be made available to commission staff for inspection pursuant to section 393.140, RSMo 2000 and 4 CSR 240-10.010.

(E) For all inspections, within a reasonable period, electrical corporation records shall specify the circuit, area, or equipment inspected, the date of the inspection, and any problems identified during each inspection, as well as the scheduled date of corrective action. For detailed and intrusive inspections, electrical corporations shall also rate the condition of inspected equipment. Upon completion of corrective action, electrical corporation records shall show the nature of the work and the date the work was performed.

(F) Where facilities are exposed to extraordinary conditions or when an electrical corporation has demonstrated a pattern of noncompliance with Commission Safety Standards, 4 CSR 240-18; Electrical Corporation Infrastructure Standards, 4 CSR 240-23.020; or any other commission rules relating to the provision of safe and adequate service, the commission may require a shorter interval between inspections.

(G) Commission staff shall review each electrical corporation's annual report and may inspect and verify that the electrical corporation is in compliance with this rule.

(H) If the electrical corporation discovers, or should have discovered, upon inspection as required under this rule, or the electrical corporation is otherwise given notice that prudent operation of facilities would require corrective action, then it shall take such corrective action within a reasonable period of time. If harm to person or property is imminent, then corrective or remedial action shall be taken immediately, or as soon as possible.

(4) In the event an electrical corporation incurs expenses as a result of this rule in excess of the costs included in current rates, the corporation may submit a request to the commission for accounting authorization to defer recognition and possible recovery of these excess expenses until the effective date of rates resulting from its next general rate case, filed after the effective date of this rule, using a tracking mechanism to record the difference between the actually incurred expenses as a result of this rule and the amount included in the corporation's rates, or if there is no identifiable amount included in the corporation's rates, the amount reflected in the appropriate accounts for infrastructure inspection and maintenance on the corporation's books for the test year (as updated) from the corporation's last rate case will be used to determine the amount included in current rates. In the event that such authorization is granted, the next general rate case must be filed no later than five (5) years after the effective date of this rule. Parties to any electrical corporation request for accounting authorization pursuant to this rule may ask the commission to require the electrical corporation to collect and maintain data (such as actual revenues and actual infrastructure inspection expenses) until such time as the commission addresses ratemaking for the deferrals. The commission will address the

ratemaking of any costs deferred under these accounting authorizations at the time the electrical corporation seeks ratemaking in a general rate case.

(5) Variances. A variance from a provision of this rule may be granted for good cause shown. Nothing in this rule shall prevent an electrical corporation from proposing and the Commission from approving an alternative infrastructure inspection program varying from the table, included herein, titled "Electrical Corporation System Inspection Cycles (Maximum Intervals in Years)" if the electrical corporation can establish that the alternative infrastructure inspection program has previously produced equal to or greater reliability performance than what would be produced under this rule or that the alternative infrastructure inspection program shall produce equal to or greater reliability performance in the future than what would be produced under this rule.

*AUTHORITY: sections 386.040, 386.250, 386.310 and 393.140, RSMo 2000, and 393.130, RSMo Supp. 2006. Original rule filed June 15, 2007; effective January 30, 2008.*

*PUBLIC COST: This proposed rule will cost state agencies or political subdivisions \$65,767 in the first year, and \$60,747 each year thereafter.*

*PRIVATE COST: This proposed rule will cost private entities \$8,348,000 in implementation costs. Annual compliance costs will be \$17,750,675. However, the proposed rule includes a cost recovery mechanism that, when used properly, will allow the electric companies to recover all prudently incurred costs of complying with this rule.*

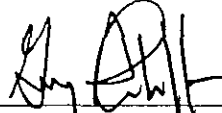
*NOTICE TO SUBMIT COMMENTS AND NOTICE OF PUBLIC HEARING: Anyone may file comments in support of or in opposition to this proposed rule with the Missouri Public Service Commission, Colleen M. Dale, Secretary of the Commission, PO Box 360, Jefferson City, MO 65102. To be considered, comments must be received at the commission's offices on or before February 4, 2008, and should include a reference to commission Case No. EX-2007-0214. Comments may be submitted via a filing using the commission's electronic filing and information system at <<http://www.psc.mo.gov/efis.asp>>. A public hearing regarding this proposed rule is scheduled for February 4, 2008, at 10:00 am in Room 310 of the Governor Office Building, 200 Madison Street, Jefferson City, Missouri. Interested persons may appear at this hearing to submit additional comments and/or testimony in support of or in opposition to this proposed rule, and may be asked to respond to commission questions. Any persons with special needs as addressed by the Americans with Disabilities Act should contact the Missouri Public Service Commission at least ten (10) days prior to the hearing at one (1) of the following numbers: Consumer Services Hotline 1-800-392-4211 or TDD Hotline 1-800-829-7541.*



**AFFIDAVIT  
(PUBLIC COST)**

STATE OF MISSOURI     )  
  )  
COUNTY OF COLE     )

I, Gregory A. Steinhoff, Director of the Department of Economic Development, first being duly sworn on my oath, state that it is my opinion that the attached fiscal note for proposed rule 4 CSR 240-23.020 is a reasonably accurate estimate.



\_\_\_\_\_  
Gregory A. Steinhoff  
Director  
Department of Economic Development

Subscribed and sworn to before me this 31 day of May, 2007. I am commissioned as a notary public within the County of COLE, State of Missouri, and my commission expires on 17 July 2007.

  
\_\_\_\_\_  
NOTARY PUBLIC

**ANNETTE KEHNER  
Notary Public - Notary Seal  
STATE OF MISSOURI  
Cole County  
My Commission Expires: July 17, 2007**

## FISCAL NOTE

### PUBLIC COST

#### I. RULE NUMBER

Rule Number and Name	4 CSR 240-23.020, Electrical Corporation Infrastructure Standards
Type of Rulemaking:	Proposed Rule

#### II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Missouri Public Service Commission	\$65,767 first year, \$60,747 each year thereafter

#### III. WORKSHEET

0.5 FTE Utility Engineering Specialist III \$25,116 annually

0.5 FTE Utility Engineering Specialist II \$22,236 annually

First year equipment \$5,020

Annual Equipment Expense \$1,090

Annual Office Space Rental \$2,700

Annual Travel Expense \$9,605

#### IV. ASSUMPTIONS

All costs in 2007 dollars

Costs reflect estimates provided for other fiscal notes for various General Assembly bills from this year's session.

A total of two additional FTEs were assumed for this rule and the Vegetation Management Standards rule that is also being considered. Their time is assumed to be evenly split between these two rules. In most cases, these FTEs will be able to conduct reviews of the utilities' infrastructure inspection and vegetation management practices in the same visit. This should reduce their travel time and increase their productivity. However, these reviews will require facility reviews (including walking electric lines and observing utility employees performing the various tasks required by these rules) and on-site document reviews at various district/division offices. This will also require reports by these two FTEs on the status of the utilities' efforts at various times of the year.

## FISCAL NOTE

### PRIVATE COST

#### I. RULE NUMBER

Rule Number and Name:	<b>4 CSR 240-23.020 Electrical Corporation Infrastructure Standards</b>
Type of Rulemaking	<b>Proposed Rule</b>

#### II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Four (4)	Investor Owned Electric Utility Companies	
	AmerenUE	Implementation: \$848,000 \$9,857,002 annually
	Empire	Implementation – None Listed \$4,299,418 annually
	Aquila	Implementation - \$7,500,000 \$1,094,255 annually
	Kansas City Power & Light	Implementation – None listed \$2,500,000 annually

#### III. WORKSHEET

For fiscal impacts please see ASSUMPTIONS below for each utility.

#### IV. ASSUMPTIONS

AmerenUE

##### Estimated Implementation Cost

Software & Hardware Additions:    \$ 848,000  
Total Implementation Cost:           \$ 848,000

##### Estimated Annual Cost

Visual Inspections:                   \$ 3,046,932  
Detail/Intrusive Inspections:       \$ 6,410,070  
Staffing Additions Required:         \$ 400,000  
Total Annual Cost:                     \$ 9,857,002

The following assumptions were made when preparing these estimates:

1. "Rural" service areas are defined as Green Hills, Little Dixie, Capital, Lakeside, Jefferson, Franklin, Ironton, St. Francois, and Southeast.
2. "Urban" services areas are defined as Wentzville, St. Charles, Ellisville, Dorsett, Berkeley, Geraldine, and Mackenzie.
3. Poles, wires, cables, transformers, and hardware are visually inspected each year during the "Patrol" inspection.
4. All distribution wood poles receive an "Intrusive" inspection every 12 years
5. All transmission wood poles receive an "Intrusive" inspection every 10 years
6. All wood poles must have "Intrusive" inspection by age 18.
7. All inspections are performed with contractor labor.
8. All costs are current with no escalation factors.
9. Material costs are 18% of total costs.
10. Costs to "Patrol" inspect distribution wood poles are estimated at \$13 per pole.
11. Costs to "Intrusive" inspect / retreat distribution wood poles are estimated at \$62 per pole.
12. Costs to "Intrusive" inspect / retreat transmission wood poles are estimated at \$125 per pole.
13. Costs to "Patrol" inspect padmount transformers are estimated at \$10 per transformer.
14. Costs to "Detail" inspect padmount transformers are estimated at \$60 per transformer.

### Kansas City Power & Light

The following summary is KCP&L's estimate of the increased cost expected for achieving compliance with the final version of the Missouri Public Service Commission Infrastructure Inspection Rules approved in October 2007.

The estimated increased cost to comply with the MPSC proposed Infrastructure Inspection rules is approximately \$2,500,000. This breaks down into \$1,170,000 for facility inspections and \$1,330,000 for expense repairs identified during these specific inspections. Most of the inspections mandated by the rules are not currently being performed.

These estimates were prepared based on historical insight and extensive experience. However, they are still estimates. Intentions are to implement methods for tracking the actual cost for insuring compliance with the new rules. The actual costs will then be applied when preparing future budgets. Below is a summary of the areas of the new rules that impact current practices and the associated cost increases used to calculate the above totals.

<u>Infrastructure Component</u>	<u>Annual Cost</u>
Inspection - Poles/Overhead Structures	\$318,000
Inspection - Overhead Circuit Components and Equipment	\$351,000
Inspection - Pad-mounted Transformers and Equipment	\$ 85,000
Inspection - Underground Structures and Network Equipment	\$416,000
Inspection Total	\$1,170,000
Repairs - Overhead Circuit Components and Equipment	\$468,000
Repairs - Pad-mounted Transformers and Equipment	\$ 74,000
Repairs - Underground Structures and Network Equipment	\$788,000
Repairs Total	\$1,330,000
<b>Infrastructure Rule Total</b>	<b>\$2,500,000</b>

Notes:

These estimates assume that inspection cycles are selected to take advantage of overlapping cycle requirements. For example, when a detailed inspection is performed, it will fulfill the requirement for a patrol at the same time. This plan will spread the number of inspections evenly across ALL years and will not cause a "bunching" of inspections in particular years. This allows the cost estimates above to be spread evenly across all budget years.

The above estimates do not include capital repairs.

Empire District Electric

2008	\$4,122,360
2009	\$4,790,837
2010	<u>\$3,985,059</u>
Total	\$12,898,256
3 year average	\$4,299,418

Aquila

<b>ELECTRIC UTILITY</b>	<b>One-Time Impact Implementation Cost</b>	<b>Ongoing Costs per year for First 3 years to closest \$100,000</b>
<b>Aquila, Inc. Field Assessment &amp; Survey</b>	\$7,500,000	
<b>Annual Patrol</b>		\$35,000
<b>Detailed Inspection</b>		\$1,059,255
<b>Total</b>	\$7,500,000	\$1,094,255

**One Time Impact:**

The proposed legislature requires a detailed inspection of most equipment and structures every eight to twelve years and the condition of each rated and recorded. This would require a complete field survey and inventory to establish a computer database of equipment and to establish a recordkeeping system. This work would have to be contracted and is estimated to take approximately three years at a total cost of \$7,500,000.

**Annual Patrol:**

The proposed legislation requires a patrol every 4 years in urban areas and 6 years in rural areas to identify obvious structural problems and hazards. Currently this type of a patrol is occurring over a five-year period at an estimated cost of approximately \$150,000. The new patrol interval would increase our costs approximately \$35,000/year.

**Detailed Inspection**

Detailed inspections for most equipment are required every 8 – 12 years and require rating the condition of each piece of equipment. This would require opening each padmount and switchgear and operating line switches to determine their condition. Detailed inspections would need to be levelized over the 8 – 12 year period and probably much of the work contracted.

**Estimated Costs for Detailed Inspections**

<b>Equipment</b>	<b>Approx. Number</b>	<b>Inspection / Operation Cost Each</b>	<b>Total</b>
Switches	9,000	\$600	\$5,400,000
OCR's	1,000	\$100	\$100,000
Capacitor Banks	600	\$100	\$60,000
Regulators	650	\$100	\$65,000
3 Phase OH Tx	5,542	\$50	\$277,100
1 Phase OH Tx	41,335	\$50	\$2,066,750
3 Phase Padmount Tx	2,013	\$100	\$201,300
1 Phase Padmount Tx	24,024	\$100	\$2,402,400
Switch Cabinets	200	\$100	\$20,000
			<b>\$10,592,550</b>
		<b>Annualized</b>	<b>\$1,059,255</b>